

The Genus *Stenosphenus* Haldeman (Coleoptera: Cerambycidae)

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Abstract.—The elaphidiine genus *Stenosphenus* Haldeman is reviewed and re-described. The following new species are proposed: *S. bivittatus*, *S. proruber*, *S. maccartyi*, *S. cordovanus*, and *S. penicilliventris*, all from Mexico. Two new subspecies are proposed: *S. langurioides wappesi* from Mexico, and *S. lineatus costaricensis* from Costa Rica. The following changes in status are proposed: *S. sexlineatus* Bates as a subspecies of *S. ochraceus* Bates, and *S. novatus* Horn as a subspecies of *S. cribripennis* Thomson. The following synonymies are proposed: the genus *Stenosphenopsis* Linsley as a junior synonym of *Stenosphenus*; *S. pinorum* Casey as a synonym of *S. notatus*; *Stenosphenopsis nitidicollis* Linsley as a synonym of *Stenosphenus langurioides langurioides* Bates; *S. ebeninus* and *S. erythroderus* as synonyms of *S. trispinosus*; *S. comus* Bates, *S. pruddeni* Casey, *S. aridus* Linsley, and *S. nigricornis* Fisher as synonyms of *S. debilis*; *S. sublaevicollis* as a synonym of *S. rufipes*; *S. longicollis* Casey and *S. castaneus* Casey as synonyms of *S. dolosus*; *S. amabilis* Newman, *S. blairi* Linsley, *S. lepidus* Horn, *S. arizonicus* Linsley, *S. subtilis* Bates, *S. piceus* Knull, *S. texanus* Knull, *S. basicornis* Linsley, and *S. rossi* Linsley as synonyms of *S. sobrius*. A key to the genus is provided.

The genus *Stenosphenus* Haldeman as currently defined includes 39 species (Chemsak and Linsley, 1982). Of these, 15 are known to occur in the United States, 23 in Mexico and Central America, and one in Cuba. Linsley (1963) followed Fisher's (1946) treatment of the genus for the United States. Since that time, much more material has become available, particularly from Mexico and Central America. This study of thousands of specimens indicates a different geographic composition for *Stenosphenus*. The group is clearly centered in Mexico with 21 species and subspecies occurring there with only 6 in the United States. Thus far, only 2 species are known from as far south as Costa Rica. This distributional pattern is typical of many Mexico centered Cerambycidae. The genera contain a relatively large number of species spread throughout Mexico with some in common with the United States. Generally there is at least one species widely spread over the eastern United States. Among these genera are *Psyrassa*, *Euderces*, *Ecyrus*, *Phaea*, and *Tetraopes*.

The name *Stenosphenus* was first used by Dejean (1835) who listed three undescribed species under that name. Haldeman (1847) validated the genus to accommodate *Callidium notatum* Olivier. Thomson (1860) also described *Steno-*

sphenus with *S. cribripennis* as the type species. Various authors subsequently added species to the genus, many based on color differences.

According to our interpretation of the genus, *Stenosphenus* now contains 28 species and subspecies, 7 of which are described as new.

Genus *Stenosphenus* Haldeman

Stenosphenus Haldeman, 1847:39; Chevrolat, 1848:13; White, 1853:104; LeConte, 1873:316; Bates, 1880:65; Bates, 1885:312; LeConte and Horn, 1883:301; Horn, 1885:177; Horn, 1886:xii; Leng, 1887:193; Blatchley, 1910:1031; Casey, 1912:346; Linsley, 1936:477; Fisher, 1946:86; Knull, 1946:197; Linsley, 1961:178; Linsley, 1963:14; de Zayas, 1975:159.

Stenosphenus Thomson (not Haldeman), 1860:372; Thomson, 1864:433; Lacordaire, 1869:130. (Type species: *Stenosphenus cribripennis* Thomson, monobasic.)

Stenosphenopsis Linsley, 1935:95. (Type species: *Stenosphenopsis nitidicollis* Linsley, monobasic.) NEW SYNONYMY.

Form moderately elongate. Head small; front elongate; eyes finely faceted; palpi short, subequal, last segment nearly cylindrical; antennal tubercles not or slightly elevated; antennae slender, finely punctate and pubescent, sparsely clothed with flying hairs, usually surpassing elytral apices in male, usually not reaching them in female, intermediate segments often carinate in male, segments 3–7 or 8 bearing apical spine on inside, 3rd segment longer than 4th, segments 4–10 subequal, 11th often longer than 10th. Pronotum usually somewhat narrowed anteriorly, sides rounded, unarmed; disk usually polished, sparsely punctate and nearly glabrous; prosternum with procoxal cavities rounded, not angulate externally, intercoxal process abruptly declivous and perpendicular at apex, male prosternum usually bearing distinct patch of coarse punctures in front of procoxae; mesosternum broad, declivous in front, emarginate or truncate behind, mesocoxal cavities closed externally. Elytra elongate, parallel-sided or tapering posteriorly; apices truncate or emarginate, angles dentate or spiniform. Legs moderately short, slender; femora incrassate to subclavate, not distinctly clavate, apices unarmed; tibiae carinate.

Type species. — *Callidium notatum* Olivier (monobasic).

Range. — North and Central America, and Cuba.

The genus *Stenosphenus* is easily recognizable among the New World Elaphidiini. The moderate sized, tapering body form and laterally unarmed, anteriorly narrowed pronotum are distinctive characters of the genus. The shape of the prosternal intercoxal process and usual presence of coarsely punctate prosternal areas in males will also separate *Stenosphenus* from other related genera.

Previous efforts to separate species have partly relied on characters such as color, number of antennal spines, and shape of the elytral apices. Examination of large series of specimens has indicated that these characters are variable and sometimes unreliable in determining species. The color of the pronotum and appendages may range from reddish or pale to black within the same population and may also vary geographically.

Adults of some species of *Stenosphenus* are often encountered in large numbers on blossoms of trees and shrubs. They may also be abundant on dead or dying limbs and branches of their host plants, usually during the day. Some species are occasionally attracted to lights, but in small numbers.

KEY TO THE SPECIES OF *STENOSPHEUS*

- 1. Dorsal surface vittate, or with longitudinal glabrous lines, which are sometimes indistinct, but visible to the naked eye 2
- Dorsal surface lacking vittae or glabrous lines 13
- 2(1). Dorsal surface with contrasting blackish integumental vittae 3
- Dorsal surface with vittae glabrous, not of contrasting color 7
- 3(2). Elytra bright red, with a wide, common, sutural black vitta, dilated behind scutellum, and extending to apices. Length 8–11 mm. Mexico (Puebla, Oaxaca, Michoacan) *S. suturalis* Bates
- Elytra dark yellowish to orange-brown, with suture narrowly blackish; narrow black vittae present on pronotum or elytra 4
- 4(3). Pronotum and head yellowish, shining, with a black median vitta. Elytra greyish-yellow. Length 10–12 mm. Mexico (Chiapas, Tabasco) and Guatemala *S. vitticollis* Bates
- Pronotum and head lacking a median black vitta 5
- 5(4). Form small, slender; length 7–9 mm. Pronotum with an arcuate black vitta on each side of disk, overlaid with fine, silky, recumbent pubescence intermixed with recumbent setae. Elytral integument often with black vittae. Mexico (Yucatan, Quintana Roo) and Guatemala *S. bivittatus*, n. sp.
- Form larger, robust. Pronotum with lateral pubescence consisting only of recumbent setae. Integument orange-brown; elytra with three narrow, glabrous, and partially black, vittae 6
- 6(5). Pronotum evenly rounded to apex, marked with a wide, blackish vitta on each side of disk, moderately densely overlaid with recumbent setae. Length 12–17 mm. Mexico (Sinaloa, Nayarit, Jalisco, Chiapas) to Costa Rica *S. ochraceus ochraceus* Bates
- Pronotum abruptly rounded near apex, lacking blackish markings, with lateral setae sparse. Length 10–15 mm. Mexico (Yucatan, Quintana Roo) *S. ochraceus sexlineatus* Bates
- 7(2). Elytra with glabrous and impunctate vittae nearest suture much wider than remaining vittae. Prosternum of male with punctate area wide; sides of prothorax lacking accessory punctate patch. Head and prothorax dark red. Length 10–14 mm. Texas to El Salvador *S. lugens* LeConte
- Elytra with glabrous vittae nearest suture subequal to remaining discal vittae. Prothorax laterally with at least a small, oval, accessory punctate patch 8
- 8(7). Abdomen with lateral pubescence consisting primarily of erect hairs or setae. Head and pronotum orange-red. Elytra with glabrous vittae narrow, indistinct. Prothorax of male laterally with a small, oblong, accessory patch. Meso- and metafemora without apical carinae. Length 9–13 mm. Mexico (Jalisco, Oaxaca, Guerrero) *S. proruber*, n. sp.
- Abdomen with lateral pubescence fine, silky, recumbent. Elytra with glabrous vittae distinct. Meso- and metafemora carinate apically 9
- 9(8). Elytra with sides tapering, widest at humeri; apices at least feebly

- trispinose. Mesosternal processes somewhat prominent. Prosternum deeply impressed when viewed from side 10
- Elytra with sides not tapering from humeri, width across middle subequal to humeral width; apices bispinose. Mesosternal process arcuate. Prosternum shallowly impressed when viewed from side 11
- 10(9). Head and pronotum reddish-black to piceous. Prothorax of male with large, oval, lateral accessory punctate patch. Length 9.5–15 mm. Mexico (Mexico, Jalisco) to Costa Rica *S. langurioides langurioides* Bates
- Head blackish, pronotum reddish-orange with apex narrowly piceous. Elytral apices trispinose. Length 11–17 mm. Mexico (Chiapas, Quintana Roo) *S. langurioides wappesi*, n. ssp.
- 11(9). Elytra with apices emarginate, bispinose; surface with vittate interstices punctate. Prothorax of male with a large, oval, lateral accessory punctate patch. Integument piceous with head and pronotum red. Length 9–12.5 mm. Mexico (Quintana Roo, Yucatan) *S. gaumeri* Bates
- Elytra with apices transversely truncate, outer angles with stout spine, inner angles dentate; surface with vittate interstices impunctate. Prothorax of male with a small, oval, lateral accessory punctate patch 12
- 12(11). Integument piceous black, femora reddish. Length 10–13 mm. Mexico (Chiapas) and Guatemala *S. lineatus lineatus* Bates
- Integument piceous, legs black, head dark red, pronotum orange-red; elytra sometimes with base brownish. Length 10–13 mm. Costa Rica *S. lineatus costaricensis*, n. ssp.
- 13(1). Elytra with apices trispinose 14
- Elytra with apices bispinose, bidentate, or truncate 15
- 14(13). Elytra with scattered fine punctures on disk, with distinctly coarser punctures (except at base and apex) on the straight longitudinal striae. Integument black, shining, with pronotum or legs sometimes red. Length 9–15.5 mm. Mexico to Costa Rica .. *S. trispinosus* Bates
- Elytra with punctation fine, uniform. Integument piceous to black, shining, legs sometimes reddish. Length 15–17 mm. Mexico (Oaxaca, Michoacan, Veracruz, Chiapas) to El Salvador *S. protensus* Bates
- 15(13). Integument paler, testaceous brown to reddish-brown, with pronotum and legs of same or darker color 16
- Integument darker, castaneous or dark brown to black, with pronotum and legs often at least partially orange or red 18
- 16(15). Integument light to medium brown, rarely piceous, antennae, tibiae, and tarsi often darker. Pronotum with disk moderately punctate, with a longitudinal, glabrous area behind middle. Elytra moderately coarsely, densely punctate. Size small, length 7–12 mm. Arizona, S. California, Western Texas, Mexico (Baja California, Durango) *S. debilis* Horn
- Integument reddish-brown. Pronotum with disk very sparsely, finely punctate. Size larger, length 13–20 mm 17

- 17(16). Elytra clothed with fine, pale, suberect, setose hairs. Pronotum with sides slightly rounded, sometimes feebly rugose. Prothorax of male lacking lateral accessory punctate patch. Antennae of male surpassing elytral apices by 4 segments, spines on segments 3–7, 11th segment 1½ times as long as 10th. Length 13–17 mm. Mexico (Sinaloa, Guerrero, Jalisco, Mexico) *S. rubidus* Linsley
- Elytra clothed with coarse, golden yellowish, subdepressed hairs. Pronotum with sides moderately rounded. Prothorax of male with large, oval, well-defined, lateral accessory punctate patch. Antennae of male surpassing elytral apices by 3 segments, with spines on segments 3–8, 11th segment subequal to 10th. Length 14–20 mm. Mexico (Jalisco, Oaxaca, Colima, Guerrero) ... *S. maccartyi*, n. sp.
- 18(15). Elytra dark metallic bluish-violet, convex, coarsely, closely punctate. Head and prothorax yellow-orange, nearly impunctate. Length 6.25–6.5 mm. Cuba *S. insulicola* Fisher
- Elytra castaneous, piceous, dark brown, or black, with at most feeble metallic reflections 19
- 19(18). Pronotum widest at base. Elytra robust, about 2½ times as long as broad, sides feebly rounded, apices obliquely truncate, bidentate. Mesotibiae of male apically dilated. Abdomen of male with terminal sternite medially spined. Antennae moderately robust, piceous to orange-brown, 3rd segment feebly arcuate. Integument black, with legs dark orange. Length 9–14 mm. Mexico (Sinaloa, Jalisco, Colima, Guerrero, Morelos, Oaxaca, Puebla) *S. rufipes* Bates
- Pronotum widest at or behind middle. Mesotibiae and abdomen of male not modified as above. Antennae blackish, 3rd segment linear 20
- 20(19). Form moderately slender, sides subparallel. Pronotum feebly rounded, slightly longer than wide. Underside with a tuft of hairs anterior to each metacoxa composed of long, coarse, reddish hairs on male, a few long, fine, erect, pale hairs on female. Integument black, with faint bluish reflection to elytra, pronotum often red. Length 7.5–12.5 mm. Mexico (Chiapas) *S. penicilliventris*, n. sp.
- Form moderately robust, sides feebly curved. Pronotum with sides rounded, subquadrate or slightly wider than long. Underside without tufts anterior to metacoxae. Elytra without bluish reflection 21
- 21(20). Pronotum shining and nearly impunctate in middle; sides of disk coarsely punctate and clothed with recumbent whitish setae 22
- Pronotum lacking recumbent whitish setae at sides of disk 23
- 22(21). Pronotum broader than long, rounded, yellowish, usually with a large central brown macula. Elytra piceous, robust, about 2½ times as long as humeral width; pubescence moderately sparse, coarse, suberect. Length 9.5–12 mm. Eastern North America *S. notatus* (Olivier)
- Pronotum quadrate or slightly longer than wide. Integument cordovan brown. Elytra tapering, more than 2½ times as long as humeral

- width; pubescence moderately dense. Length 10–12 mm. Mexico (Sinaloa, Michoacan, Jalisco, Guerrero, Oaxaca) *S. cordovanus*, n. sp.
- 23(21). Elytra feebly carinate on each side of suture; apices oblique, strongly bispinose; surface moderately coarsely punctate. Head moderately narrow, elongate. Prothorax with lateral punctures dense, coarse; prosternum of male with punctate patches separate, oval 24
- Elytra lacking carinae; apices truncate, bidentate, or moderately bispinose. Head not elongate. Prothorax with lateral punctures scattered; prosternum with punctate area wide, trapezoidal, median division vague 25
- 24(23). Pronotum red; form moderately robust, elytra slightly less than 2½ times as long as width across humeri. Length 9–11 mm. Mexico (Baja California) *S. cribripennis novatus* Horn
- Pronotum black; form less robust, elytra slightly more than 2½ times as long as width across humeri. Length 9–14.5 mm. Western and southern Mexico to Guatemala *S. cribripennis cribripennis* Thomson
- 25(23). Pronotum with discal surface somewhat uneven, coarsely, closely punctate on either side of a feebly raised, median glabrous callus. Elytra coarsely, densely punctate; apices truncate, with angles at most feebly dentate. Integument piceous with pronotum often orange, legs usually dark. Length 8–13.5 mm. Arizona, Utah, New Mexico, Western Texas *S. beyeri* Schaeffer
- Pronotum with discal surface even, nearly impunctate, or with scattered moderately coarse punctures. Elytra moderately coarsely, densely punctate, with apices dentate or spinose 26
- 26(25). Femora piceous. Elytra castaneous, with apices oblique, outer angle produced, inner angle dentate. Pronotum dull orange, nearly impunctate. Length 7–14 mm. Texas, eastern Mexico (Nuevo Leon to Vera Cruz) *S. dolosus* Horn
- Femora red, usually infuscated at apices. Elytra black, with apices truncate, bidentate. Pronotum black or red, with a few moderately coarse punctures scattered on disk. Length 7–15 mm. Arizona and Western Texas to Guatemala *S. sobrius* (Newman)

***Stenosphenus notatus* (Olivier)**

Callidium notatum Olivier, 1795:61, pl. 7, fig. 89.

Stenosphenus notatus: Haldeman, 1847:39; White, 1853:104; Horn, 1885:180; Leng, 1887:193; Hamilton, 1888:66; Hamilton, 1891:130; Wickham, 1897:149; Blatchley, 1910:1032; Craighead, 1923:72, pl. 15, fig. 8, pl. 21, fig. 6 (larva, pupa); Fisher, 1946:89; Knoll, 1946:197, pl. 11, fig. 43; Linsley, 1963:16, fig. 4; Laliberte et al., 1977:99; Waters and Hyche, 1981:285; Hovore, Penrose, and Neck, 1986:300 (habits).

Elaphidion notatum: LeConte, 1850:12.

Elaphidion deflendum Newman, 1840:6.

Stenocorus discoideus Sturm, 1826:199.

Stenosphenus discicollis Dejean, 1835:330; Dejean, 1836:355.

Stenosphenus pinorum Casey, 1924:268; Fisher, 1946:89; Linsley, 1963:16. NEW SYNONYMY.

Male. — Form moderately robust; integument piceous to black, strongly shining; pronotum and underside of head reddish yellow, the former usually with a large, black discal spot. Head with antennae about $1\frac{1}{4}$ times as long as body, segments 3–7 spinose at apex. Pronotum widest at middle, sides broadly rounded; surface indistinctly punctate, sparsely clothed, especially at sides, with short, recumbent, whitish hairs; prosternum with punctate areas anterior to procoxae obsolete. Elytra sparsely, uniformly punctate, sparsely, uniformly clothed with short, semierect, whitish hairs; apices separately emarginate, both angles acute, the lateral tooth slightly longer than the sutural one. Length, 9–16 mm.

Female. — Similar to male, but with antennae slightly shorter than body, segments 3–8 spinose at apex, 11th segment short length, 9–16 mm.

Type locality. — Of *notatum*, New York; *discoideus*, *discicollis*, America borealis; *deflendum*, Georgia; *pinorum*, North Carolina.

Range. — Eastern Canada and United States west to Rocky Mountains.

Flight period. — May–July.

This species may be easily recognized by the form and color of the pronotum. Adults breed in dead limbs of hickory, pecan, and hackberry, with adults overwintering in their pupal cells until the spring emergence.

***Stenosphenus suturalis* Bates**

(Fig. 4)

Stenosphenus suturalis Bates, 1872:191; Bates, 1880:67; Bates, 1885:313.

Male. — Form moderately slender, tapering; integument black, moderately shining; elytra, and rarely prothorax, red, with a broad, black, common sutural vitta widening from behind scutellum, then longitudinal to apex. Head moderately narrow; antennae slightly longer than body, with segments 3–7 spinose at apex. Pronotum widest behind middle, sides rounded, narrowing somewhat to apex; surface sparsely, distinctly punctate, nearly glabrous, with a few moderately long, pale, erect hairs at sides; prosternum lacking distinct punctate patches. Elytra uniformly, moderately sparsely punctate, uniformly, moderately sparsely clothed with suberect pale hairs; apices somewhat oblique, sinuately truncate, with inner angle dentate, outer angle moderately spinose. Length, 9–11 mm.

Female. — Similar to male, but form somewhat less tapering; antennae slightly shorter than body, with spines on segments 3–8. Length, 8–11 mm.

Type locality. — Mexico.

Range. — South-central Mexico (see Fig. 4).

Flight period. — August–October.

This species is easily recognized by the red and black elytra. Specimens from Michoacan examined in this study differ from typical *S. suturalis*, by having a red prothorax.

***Stenosphenus vitticollis* Bates**

Stenosphenus vitticollis Bates, 1892:169, pl. 7, fig. 6; Chemsak, 1967:80 (lectotype).

Male. — Form moderately robust; integument testaceous golden-yellow, with blackish markings as follows: a median vitta from front of head to base of pronotum.

tum, narrowing somewhat and continuing onto scutellum and elytral suture, and across elytral apices, elytra also often with a short humeral vitta, antennae except extreme bases of segments, apices of femora, tibiae, and tarsal segments, and parts of underside, including a pair of vittae on the prosternum from outside the procoxae to the apex. Head narrow; antennae slightly longer than body, segments 3–8 with a slender spine at apex. Pronotum robust, nearly as wide at base as elytral humeri, sides subparallel on basal half, narrowed on apical half; surface shining, nearly impunctate, glabrous except for a few scattered, erect, pale hairs laterally at base; prosternum with well-separated, subtriangular punctate patches; procoxal process stout, prominent. Elytra less than $2\frac{1}{2}$ times as long as width across humeri, sides slightly rounded, apices emarginate, inner angles dentate, outer angles stoutly spined; surface moderately closely, finely, and uniformly punctate, uniformly clothed with suberect, pale yellowish hairs. Abdomen with lateral pubescence coarse, subdepressed, whitish. Length, 10–12 mm.

Female.—Similar to male, but with antennae slightly shorter than body, segments 3–9 with apical spines; prosternum with punctate patches obsolete, feebly rugose. Length, 10–12 mm.

Type locality.—Teapa, Tabasco, Mexico.

Range.—Southeastern Mexico and Guatemala.

Flight period.—June–September.

Material examined.—15 males, 8 females, Sayaxche, El Peten, GUATEMALA, June 13–July 2, 1964 (E. C. Welling); 1 male, Panzos, GUATEMALA; 1 female, 1 km W Ocosingo, Chiapas, MEXICO, September 30, 1986 (J. E. Wappes).

This species, distinctive in color and pattern, shows little variation in the material examined, with the exception of an occasional presence on the elytra of a short, blackish, humeral vitta.

***Stenosphenus bivittatus* Giesbert and Chemsak, NEW SPECIES**
(Fig. 1)

Male.—Form small, moderately slender; integument testaceous yellow-brown to orange-brown, with blackish markings as follows: head with vitta on each side of occiput behind eye, continuing onto pronotum as a wide arcuate vitta on each side of disk, narrow vitta on elytral suture, extreme elytral apices, antennae variably except anterior face of scape, elytral discal vittae of variable length and thickness (sometimes absent), which may infuscate entire lateral portion of elytron, underside from behind prosternum, and usually apices of femora, tibiae, and tarsal segments. Head moderately narrow; antennae about as long as body, segments 3–7 with short, blunt spines at apices. Pronotum subcylindrical, quadrate, with sides lightly rounded; surface on middle of disk shining, glabrous, finely, sparsely punctate, laterally more densely, coarsely punctate, with mixture of silky recumbent golden hairs and recumbent whitish setae; prosternum with pubescent patches moderately small, angulate, well separated. Elytra about $2\frac{1}{2}$ times as long as width across humeri, sides moderately curved, apices separately transversely emarginate, with inner angle dentate, outer angle more stoutly spined; surface moderately densely and finely punctate, moderately densely clothed with subrecumbent yellowish white hairs, sparsely intermixed with longer suberect hairs. Abdomen with lateral pubescence fine, silky, recumbent. Length, 7–9 mm.

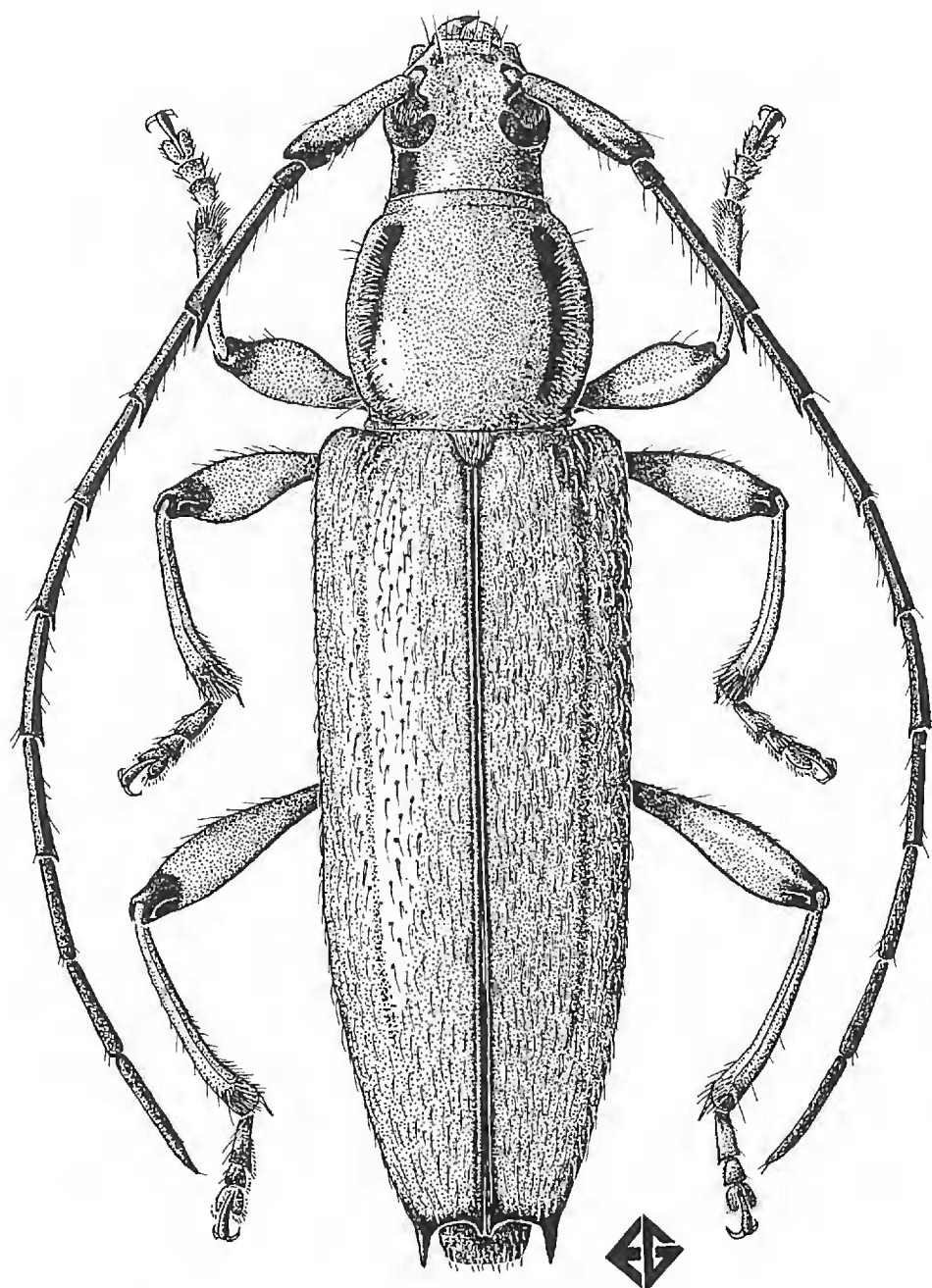


Figure 1. *Stenosphenus bivittatus*, new species, male.

Female.—Similar to male, but with antennae distinctly shorter than body, 8th segment dentate at apex; prosternum with punctate patches obsolete. Length, 9 mm.

Types.—*Holotype* male, and *allotype* (California Academy of Sciences), from GUATEMALA, Sayaxche, El Peten, July 2–13, 1964. 4 additional *paratypes*, all from MEXICO, as follows: 1 male, Simojovel, Chiapas, March 17, 1953 (E. I. Schlinger); 1 male, Simojovel, August 1–16, 1958 (J. A. Chemsak); 1 male, 30 mi W Cardenas, Tabasco, July 4, 1971 (Clark, Murray, Hart, Schaffner); 1 male, 18 km N Puterto Morelos, Quintana Roo, June 15–16, 1983 (E. Giesbert).

This species, in the few examples seen, exhibits considerable variation in markings. While all specimens are of uniform size and form, and bear nearly identical markings on the pronotum and scape, the discal vittae of the elytra vary from nearly absent on the Guatemalan pair, to distinctly vittate on the Tabascan example, to heavily infuscated on the lateral half of each elytron on the Quintana Roo specimen. The latter individual also lacks black markings on the legs, which are present to some degree on all other specimens.

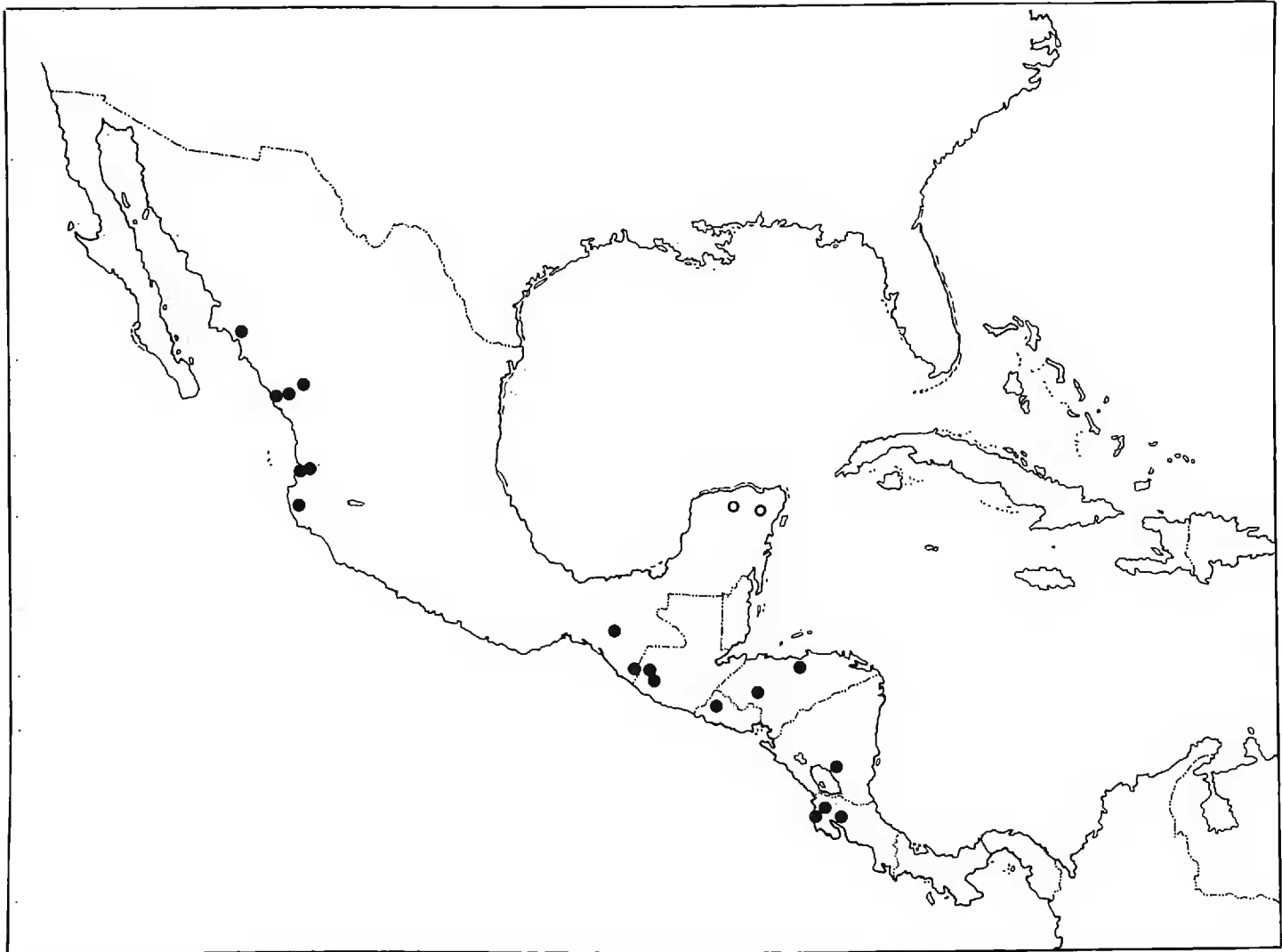


Figure 2. Known distribution of *Stenosphenus ochraceus ochraceus* Bates (solid circles), and *Stenosphenus ochraceus sexlineatus* Bates (open circles).

***Stenosphenus ochraceus ochraceus* Bates**

(Fig. 2)

Stenosphenus ochraceus Bates, 1872:190; Bates, 1880:67, pl. 6, fig. 6; Bates, 1885:313; Chemsak, 1967:80 (lectotype).

Male. —Form moderate sized, robust; integument orange-brown, with piceous to dark brown markings as follows: a large, indistinct lateral macula on each side of pronotum not attaining basal nor apical margins, often a macula on each side of prosternum anterior to procoxae, antennae except for anterior face of scape, elytra with narrow vitta on suture and underlying at least 2 of the 3 glabrous discal vittae, infusate at extreme apices of elytra, lateral portions of underside behind prosternum, tibiae, and tarsi. Head narrow, vertex with a few recumbent white setae; antennae about $1\frac{1}{3}$ times as long as body, with segments 3–8 or 9 bearing slender spines at apices. Pronotum robust, nearly as wide at base as elytral humeri, sides broadly rounded and narrowed to apex; surface of disk sparsely, finely punctate and glabrous in middle, with lateral portions moderately densely punctate, and clothed with recumbent whitish setae; prosternum with punctate patches moderately large, subrectangular, narrowly separated, and moderately pubescent. Elytra about $2\frac{1}{2}$ times as long as width across humeri, sides somewhat rounded, apices emarginate, angles spinose, with spine of outer angle much longer than that of inner angle; surface moderately finely, densely punctate, clothed with moderately dense, subrecumbent setose hairs, with 3 narrow glabrous vittae on

each elytron. Abdomen widely clothed laterally with moderately dense, recumbent, setose hairs. Length, 12–17 mm.

Female.—Similar to male, antennae subequal in length to body; punctate patches of prosternum obsolete. Length, 12–16 mm.

Type locality.—Chontales, Nicaragua.

Range.—Western and southern Mexico to Costa Rica (see Fig. 2).

One of the more frequently encountered and distinctive species in the genus, *S. ochraceus* has been collected diurnally on dead limbs (*Forsteria* sp.), on fenceposts, and at blossoms (*Casearia*, *Croton*, *Forsteronia*, etc.).

***Stenosphenus ochraceus sexlineatus* Bates, NEW STATUS**
(Fig. 2)

Stenosphenus sexlineatus Bates, 1892:169, pl. 7, fig. 5; Chemsak, 1967:80 (lectotype).

Similar to *S. o. ochraceus*, but average size slightly smaller, with pronotum somewhat more robust, the sides subparallel on basal half, then rounding abruptly to apex; prothorax lacking dark markings, and with lateral recumbent whitish setae sparse. Length, 10–15 mm.

Type locality.—Temax, N. Yucatan, Mexico.

Range.—Yucatan peninsula (see Fig. 2).

Flight period.—July–September.

***Stenosphenus lugens* LeConte**
(Figs. 3, 4)

Stenosphenus lugens LeConte, 1862:41; Horn, 1885:180; Horn, 1886:xii; Leng, 1887:93; Schaeffer, 1911:125; Fisher, 1946:90; Vogt, 1949:175 (habits); Linsley, 1963:19; Turnbow and Wappes, 1978:368 (habits); Hovore and Penrose, 1982:24 (habits); Hovore, Penrose, and Neck, 1986:300 (habits).

Stenosphenus hirsutipennis Bates, 1872:191 (note); Bates, 1880:67; Bates, 1885:313.

Male.—Form moderate sized, elongate; integument piceous black, shining, with prothorax and head dark red. Head moderately narrow, coarsely, sparsely punctate; antennae about $1\frac{1}{4}$ or more times as long as body, with segments 3–6 or 8 bearing slender spines at apices. Pronotum slightly wider than long, widest at middle, broadly rounded at sides; surface nearly impunctate and glabrous, with at most a few hairs laterally at base; prosternum with punctate patches large, wide, subrectangular, narrowly separated in middle, clothed with fine, short, erect pubescence. Elytra nearly 3 times as long as width across humeri, apices truncate, inner angle dentate, outer angle more stoutly spinose; surface rather coarsely, uniformly punctate, moderately sparsely, uniformly clothed with suberect yellowish-white setose hairs, the punctures and hairs interrupted by longitudinal, glabrous, impunctate vittae, the innermost of which is subsutural and distinctly wider than other vittae. Abdomen with pubescence moderately sparse, coarse, suberect, nearly uniform, with lateral pubescence somewhat more dense. Length, 10–14 mm.

Female.—Similar to male, but with antennae about as long as body, with spines at apices of segments 3–8 or 9; prosternum with punctate patches obsolete, feebly transversely rugose, indistinctly punctate. Length, 10–13 mm.

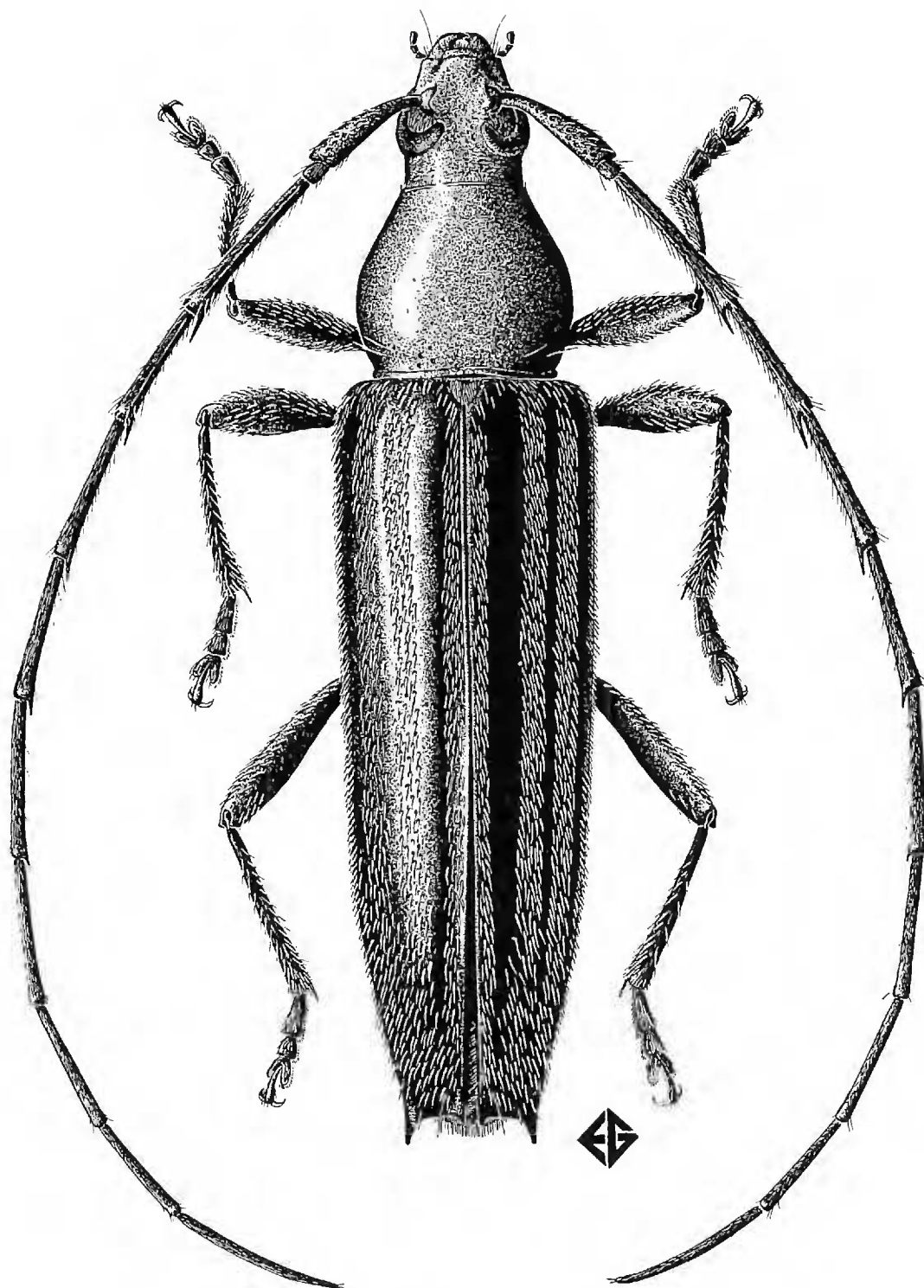


Figure 3. *Stenosphenus lugens* LeConte, male.

Type locality. — Of *lugens*, Texas; *hirsutipennis*, Mexico.

Range. — Lower Rio Grande Valley, Texas, to southern Mexico (see Fig. 4).

Flight period. — July–December.

In the northern part of its range, this species is recorded as breeding in leguminose hardwoods and hackberry. In Chiapas, Mexico, adults have been taken on *Calea*.

***Stenosphenus proruber* Giesbert and Chemsak, NEW SPECIES**

Male. — Form moderate sized, elongate; integument shining, blackish, with head, pronotum, scutellum, and rarely femora, reddish-orange. Head moderately narrow, moderately densely punctate; antennae about $1\frac{1}{2}$ times as long as body, with segments 3–7 or 8 apically spined. Pronotum slightly longer than broad, widest at middle, moderately rounded at sides; surface very sparsely, finely punctate and glabrous, with a few erect hairs laterally near base; prosternum with punctate



Figure 4. Known distribution of *Stenosphenus lugens* LeConte (closed circles), *Stenosphenus rufipes* Bates (open circles), and *Stenosphenus suturalis* Bates (solid squares).

patch large, trapezoidal, not distinctly divided in middle; prothorax with an additional small, oblong, accessory punctate patch on each side. Elytra slightly less than 3 times as long as width across humeri, slightly tapering, apices truncate, inner angle dentate, outer angle more stoutly spinose; surface uniformly punctate, moderately sparsely, uniformly clothed with suberect, pale setose hairs, intermixed with scattered longer suberect hairs, with a pair of narrow, indistinct glabrous vittae on each elytron. Abdomen with pubescence moderately sparse, coarse, suberect, with lateral pubescence of same type, subdepressed, slightly more dense. Length, 9–13 mm.

Female.—Similar to male, but with antennae only slightly longer than body, with segments 3–8 or 9 spinose at apex; prothorax without distinct punctate patches. Length, 10–12.5 mm.

Types.—*Holotype* male, *allotype* (Instituto de Biología, UNAM), and 15 *paratypes* (3 males, 12 females) from MEXICO, Estacion de Biología Chamela, Jalisco, October 14–23, 1986 (J. A. Chemsak). Additional *paratypes*, all from MEXICO, as follows: 6 males, 8 females, Estacion de Biología Chamela, Jalisco, July 10–20, 1985 (E. Giesbert); 3 males, 5 females, same locality, October 22, 1986 (J. D. McCarty) and July 7–15, 1987 (Chemsak, E. & J. Linsley); 2 males, same locality, July 19, 1987 (R. Turnbow); 9 males, 17 females, same locality, October 15–21, 1987 (Giesbert); 1 female, same locality, November 22, 1985 (F. A. Noguera M.); 19 males, 17 females, same locality, July 15–24, 1987 (F. Hovore); 7 males, 5 females, Chamela, Jalisco, July 10–15, 1985 (Giesbert); 1 female, same

locality, July 5, 1985 (R. Ayala); 1 female, same locality, July 14–17, 1986 (J. Cope); 14 males, 12 females, 17.6 km N Chamela, Jalisco, July 18, 1987 (Turnbow); 4 males, 7 females, 9 km S Chamela, Jalisco, July 15–19, 1986 (Cope); 11 males, 8 females, 23–33 km S Chamela, Jalisco, July 15–19, 1986 (Cope, Turnbow); 17 males, 18 females, 40 km S Chamela, Jalisco, July 14–17, 1986 (Cope); 3 males, 21 km N Melaque, at Fiesta Americana sign, July 17–22, 1987 (Hovore); 1 male, 6 mi N of jct. hwy. 190 & 185, E of Juchitan, July 10, 1956 (R. E. Beer & party); 1 male, 23 mi S Matias Romero, Oaxaca, August 14, 1963 (F. D. Parker, L. A. Stange); 2 females, 30 mi NE Tehuantepec, Oaxaca, July 8, 1955 (D. Giuliani); 3 males, 3 mi W Tehuantepec, cut from *Lonchocarpus* sp. and *Hae-matoxylon* sp., August 1965 (G. H. Nelson); 1 male, Hwy. 200, 15 km NE Ixtapa, Guerrero, July 18–21, 1985 (J. E. Wappes).

This species is allied to *S. lugens*, but may be separated by the bright reddish-orange head and pronotum, the longer pronotum, narrower and less distinct elytral glabrous vittae, and the small lateral accessory punctate patches on the male prothorax.

Adults have been collected from flowers of *Allenanthus*, *Apoplanesia*, *Casearia*, *Sapium*, and *Serjania*.

***Stenosphenus langurioides langurioides* Bates**

Stenosphenus langurioides Bates, 1885:313.

Stenosphenopsis nitidicollis Linsley, 1935:95. NEW SYNONYMY.

Male. — Form moderate sized, elongate, tapering; integument shining, dark reddish brown to blackish, with legs sometimes lighter than body. Head moderately sparsely, coarsely punctate; antennae about $1\frac{1}{5}$ times as long as body, with segments 3–6 or 7 spined at apices. Pronotum longer than broad, nearly cylindrical, with sides feebly rounded, base moderately strongly impressed, and apex slightly narrowed; surface nearly impunctate and glabrous, with a few scattered long, erect, pale hairs, and a few fine, recumbent, silky hairs at base; prosternum subangularly impressed when viewed from side, punctate patches angulate, indistinctly separated in middle; prothorax with moderately large, distinct, oval accessory punctate patch on each side. Elytra about 3 times as long as width across humeri, moderately tapering to narrow, apices bispinose or trispinose (middle spine usually obsolete if present), with outer spines longest; surface moderately finely, moderately sparsely punctate, with somewhat sparse, subdepressed, whitish setose hairs, intermixed with a few longer erect hairs, and limited to a pair of narrowly separated discal vittae on each side, and a lateral vitta which is sometimes nearly obsolete, separated from the disk by a wider glabrous line. Mesosternum with intercoxal process prominent; abdomen with lateral pubescence fine, silky, recumbent. Legs with femora bearing a short carina on both dorsal and ventral surface at apex. Length, 10–15 mm.

Female. — Similar to male, antennae slightly shorter, surpassing elytral apices by at most 2 segments, with segments 3–8 spinose at apices; prothorax without punctate patches. Length, 9.5–15 mm.

Type locality. — Of *langurioides*: El Reposo, Quezaltenango, Guatemala; *nitidicollis*: Bejucos, Mexico, Mexico.

Range. — Mexico to Guanacaste, Costa Rica.

Flight period.—June–December.

Material examined.—2 females, Estacion de Biologia Chamela, Jalisco, MEXICO, July 8–16, 1985 and October 24, 1986 (Chemsak); 1 male, 23.8–27.4 km S Chamela, Jalisco, MEXICO, July 16–19, 1987 (R. Turnbow); 1 male, Rio Balsas, Guerrero, MEXICO, June 24, 1932 (H. Smith); 2 males, 1 female, 4 mi W Coatepeque, GUATEMALA, July 1–4, 1965 (A. Raske, C. Slobodchikoff); 1 female, Parque Nacional Santa Rosa, Guanacaste prov., COSTA RICA, August 15, 1977 (D. Janzen); 1 male, Comelco, 8 km NW Bagaces, Guanacaste, COSTA RICA, August 15, 1971 (P. Opler); 1 male, Atenas, Alajuela prov., COSTA RICA (Schild & Burgdorf); 1 male, 1 female, “La Pacifica,” 3 km NW Canas, Guanacaste prov., COSTA RICA, June 4–10, 1973 (Opler); 1 male, 2 females, same locality, November 6, 1971 (Opler); 1 male, same locality, May 23–30, 1972 (Opler); 1 male, 1 female, same locality, June 8, 1983 (E. Giesbert).

The form of the prothorax, and the prominent mesosternum are the most distinctive characters of this species. In Costa Rica adults have been taken on flowers of *Cordia*, *Forsteronia*, *Bixa*, and an asclepiad vine. In Mexico on *Allenanthus* flowers and reared from *Brosimum*.

The following subspecies represents an apparently isolated population in southern Mexico.

***Stenosphenus langurioides wappesi* Giesbert and Chemsak,
NEW SUBSPECIES**

Similar to *S. l. langurioides*, but with elytral pubescent vittae uniform and fairly distinct, lacking a wide lateral glabrous area. Elytral apices trispinose. Prothorax reddish-orange with apex infuscated with piceous; pronotal pubescence somewhat less sparse, with small patches of fine, pale, recumbent hairs on each side at apex as well as on base. Length, 11–17 mm.

Types.—*Holotype* male, *allotype* (California Academy of Sciences), and 8 *paratypes* (6 males, 2 females) from 17 km W Tuxtla Gutierrez, Chiapas, MEXICO, June 27–July 8, 1986 (J. E. Wappes). 18 additional *paratypes* as follows: 5 males, 1 female, same locality and dates (E. Giesbert); 3 males, 7 females, same locality, June 21–25, 1987 (E. Giesbert, J. Wappes); 1 male, same locality, October 5, 1986 (E. Giesbert); 1 male, Hwy. 186, 17 km S jct. Hwy. 307, Quintana Roo, MEXICO, May 30, 1984 (R. Turnbow).

This population of *S. langurioides* is remarkably constant in coloration and in the form of the elytral apices.

We take pleasure in naming this subspecies for James E. Wappes in recognition of his interest in the Cerambycidae and excellent fieldwork.

***Stenosphenus gaumeri* Bates**

Stenosphenus gaumeri Bates, 1892:169; Chemsak, 1967:80 (lectotype).

Male.—Form moderate sized, moderately slender; integument shining, dark reddish-brown to piceous, with head, prothorax, and femora dark reddish-orange. Head moderately wide, antennae about 1½ times as long as body, with segments 3–6 spined at apex. Pronotum slightly longer than broad, widest at middle, with sides moderately rounded; surface of disk nearly impunctate and glabrous, with a few scattered, pale, erect hairs at sides, and an indistinct band of fine, short,

subrecumbent, white pubescence near base; prosternum with punctate patches large, quadrate, indistinctly separated in middle; prothorax with large, oval, accessory punctate patch. Elytra about $2\frac{3}{4}$ times as long as width across humeri, apices emarginate with angles stoutly spined; surface moderately coarsely and densely punctate, with 4 distinct, subequal vittae composed of coarse, subdepressed, yellowish-white setose hairs, sparsely intermixed with longer erect hairs, glabrous interstices somewhat less densely punctate. Abdomen sparsely clothed with long, fine, erect hairs, denser lateral whitish pubescence fine, short, recumbent, silky. Legs with apices of femora carinate. Length, 9–12.5 mm.

Female. — Not seen.

Type locality. — Temax, N. Yucatan, Mexico.

Range. — Yucatan peninsula, Mexico.

Flight period. — June–August.

Material examined. — 1 male, 10 km N Puerto Morelos, Quintana Roo, MEXICO, June 15–16, 1983 (E. Giesbert); 1 male, Piste, Yucatan, August 29, 1967 (E. C. Welling).

S. gaumeri appears to be quite rare in collections. Although the species bears a superficial resemblance to *S. lugens*, it may be easily distinguished by the recumbent, silky lateral pubescence of the underside, uniform size of the elytral glabrous interstices, the large, oval accessory lateral punctate patch of the male prothorax, and by the carinate femoral apices. *S. gaumeri* may be separated from the similar appearing *S. lineatus* Bates by the longer antennae, the emarginate elytral apices with inner and outer angles subequally spined, the punctate glabrous elytral interstices, and males by the larger lateral prothoracic accessory punctate patch.

Stenosphenus lineatus lineatus Bates

Stenosphenus lineatus Bates, 1885:313; Chemsak, 1967:80 (lectotype).

Male. — Form moderate sized; integument shining, blackish, with femora dark reddish-orange. Head moderately coarsely punctate; antennae surpassing elytral apices by about 2 segments, segments 3–7 or 8 spined at apices, outer segments apically dentate on both inside and outside. Pronotum very slightly longer than broad, sides slightly rounded, widest a little behind middle, narrowing to apex; surface of disk nearly impunctate, glabrous except for a small indistinct band of short, fine, appressed hairs near base; prosternum with punctate patches indistinctly separated in middle; prothorax with lateral accessory punctate patches present, but small and fairly indistinct. Elytra slightly less than 3 times as long as broad, sides feebly tapering, apices truncate, inner angle dentate, outer angle strongly spinose; surface with moderately coarse, close punctures and moderately dense yellowish-white subrecumbent hairs limited on disk to 3 longitudinal vittae on each elytron, distinctly separated by glabrous, impunctate interstices. Abdomen with lateral pubescence dense, short, fine, appressed. Legs with apical carinae on dorsal and ventral faces of meso- and metafemora. Length, 10–13 mm.

Female. — Similar to male, antennae subequal to body in length, with apical spines on segments 3–8 or 9; prothoracic patches obsoletely punctate. Length, 10–12 mm.

Type locality. — Paraiso, 300', Retalhuleu, Guatemala.

Range.—Chiapas, Mexico to Guatemala.

Flight period.—August–October.

Material examined.—50 males, 23 females, San Jeronimo, Volcan Tacana, Chiapas, MEXICO, October 6, 1970 (E. C. Welling); 4 males, 1 female, same locality, September 1–9, 1975 (Welling).

This species may be distinguished by the black elytra with pubescent vittae separated by glabrous, impunctate interstices and strong spines at the outer apical angle, and the reddish femora.

The following new subspecies represents the more southern populations of *S. lineatus*.

***Stenosphenus lineatus costaricensis* Giesbert and Chemsak,
NEW SUBSPECIES**

Similar to *S. l. lineatus*, but differing by the consistently reddish-orange pronotum, and usually black legs; elytra sometimes brown at base, with legs on palest specimens reddish-brown. Prothorax with lateral accessory punctate patch reduced to a few punctures. Length, 10–13 mm.

Types.—*Holotype* male, *allotype* (California Academy of Sciences), and 1 male *paratype* from COSTA RICA, 15 km S Santa Elena, Puntarenas prov., December 23–26, 1985 (E. Giesbert). 16 additional *paratypes*, all from COSTA RICA, as follows: 2 females, 4–6 km S Santa Elena, Puntarenas prov., June 4–7, 1980 (J. E. Wappes, E. Giesbert); 1 female, 2 km S Santa Elena, 1300 m, Puntarenas prov., June 2, 1979 (H. & A. Howden); 1 male, 6 km S Santa Elena, Puntarenas prov., June 6–7, 1983 (E. Giesbert); 1 male, 1 female, same locality, May 23, 1985 (F. T. Hovore); 2 males, 2 females, same locality, on blossoms of *Croton* sp., June 12, 1986 (F. T. Hovore); 2 males, 1 female, Playa Hermosa, Guanacaste prov., June 6–10, 1974 (E. Giesbert); 1 male, Atenas, Heredia prov. (Schild & Burgdorf); 1 female, Piedras Negras (Schild & Burgdorf); 1 female, “La Caja, bei San Jose,” December 1929 (H. Schmidt).

No material assignable to this species has been seen from intermediate areas between Guatemala and Costa Rica, and this apparent geographical isolation, along with the consistent difference in pronotal color, suggest subspecific status for this population. Specimens from Guanacaste and Heredia provinces are somewhat less melanic, with the elytra brownish at base, gradually darkened toward apices, and with the legs often reddish-brown.

***Stenosphenus trispinosus* Bates
(Fig. 5)**

Stenosphenus trispinosus Bates, 1872:191 (note); Bates, 1880:66; Bates, 1885:312; Chemsak, Linsley, and Mankins, 1980:30.

Stenosphenus ebeninus Bates, 1872:234; Bates, 1880:66, pl. 6, fig. 5. NEW SYNONYMY.

Stenosphenus erythroderus Bates, 1885:313; Chemsak, 1967:80 (lectotype). NEW SYNONYMY.

Male.—Form moderate sized, elongate; integument shining, black, with femora or pronotum sometimes reddish. Head narrow, moderately coarsely punctate; antennae about 1½ times as long as body, with segments 3–7 spinose at apices.

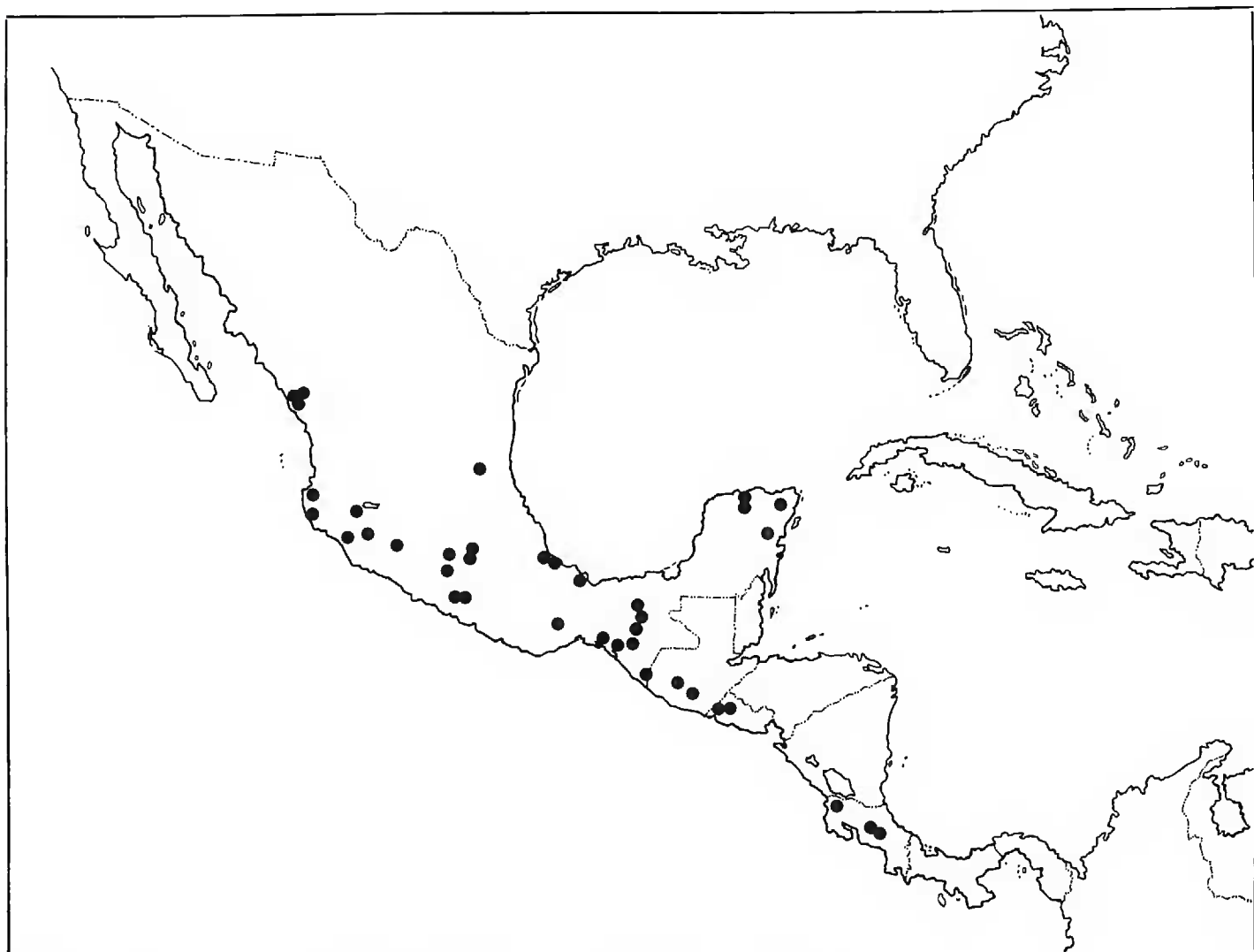


Figure 5. Known distribution of *Stenosphenus trispinosus* Bates.

Pronotum about as long as broad, widest slightly behind middle, with sides somewhat rounded and tapering to apex; surface very finely, sparsely punctate, glabrous except for very few long, erect hairs; prosternum with punctate patch wide, subtrapezoidal, indistinctly divided in middle; prothorax lacking lateral accessory punctate patches. Elytra about 3 times as long as width across humeri, tapering, apices trispinose; surface finely, sparsely punctate, with a sutural vitta and a pair of longitudinal striae of coarser punctures on each side of disk, coarser and finer punctures intermixed laterally; pubescence sparse, consisting of short suberect setae, which arise from punctate striae in rows, and are scattered elsewhere on disk. Abdomen with lateral pubescence fine, appressed, confined to small lateral patches on sternites. Length, 9–15.5 mm.

Female.—Similar to male, antennae slightly longer than body, with segments 3–8 spinose at apices. Prosternum with punctate patch obsolete, lacking coarse punctures. Length, 9–14 mm.

Type locality.—Of *trispinosus*: Mexico; *ebeninus*: Chontales, Nicaragua; *erythroderus*: Oaxaca, Mexico.

Range.—Central Mexico to Costa Rica (see Fig. 5).

Flight period.—June–December.

Specimens from Chiapas and Yucatan, Nicaragua, and Costa Rica are all black, with the punctation and pubescence of the elytra generally somewhat reduced (*ebeninus* form); other populations have either red legs and black pronotum (*trispinosus* form), or black legs and red pronotum (*erythroderus* form), with the

former found in western and southern Mexico to Chiapas, Guatemala, and El Salvador, and the latter form more common in eastern Mexico. Lack of any clear geographical separation, as well as a certain amount of intergradation of characters, rules out subspecific status for these populations.

In western Mexico this species has been reared from *Heliocarpus* and adults taken on *Croton* flowers.

Stenosphenus protensus Bates

Stenosphenus protensus Bates, 1880:66.

Male.—Form moderately large, elongate, tapering; integument shining, blackish, with femora and anterior face of scape black or reddish. Head narrow, moderately sparsely, coarsely punctate; antennae nearly twice as long as body, with segments 3–6 or 7 spined at apices. Pronotum longer than broad, widest near base, slightly rounded and tapering to apex; surface finely, sparsely punctate, glabrous except for a few scattered long erect hairs; prosternum with punctate patch subtrapezoidal, not divided in middle; prothorax without lateral accessory patch. Elytra about $3\frac{1}{2}$ times as long as width across humeri, tapering, apices narrow, trispinose, with middle spine sometimes obsolete; surface moderately finely, uniformly, moderately sparsely punctate, punctures somewhat denser near suture, each puncture bearing a moderately short, pale, suberect, setose hair. Mesosternum moderately prominent. Abdomen with lateral pubescence fine, appressed. Length, 15–17 mm.

Female.—Similar to male, antennae about $1\frac{1}{2}$ times as long as body, with segments 3–7 or 8 spined at apices. Prosternum with punctate patch obsolete. Length, 15–16.5 mm.

Type locality.—Zapote (El Zapote, Escuintla), Guatemala.

Range.—Mexico to El Salvador.

Flight period.—June, July.

Material examined.—From MEXICO: 2 females, Temescal, Oaxaca, June 30, 1964 (A. G. Raske); 1 female, Tolome, Veracruz, July 4, 1941 (C. H. Seevers); 1 male, 49 mi SE Aquila, Michoacan, July 13, 1984 (Carroll, Schaffner & Friedlander); 4 males, 4 females, 18 km W Tuxtla Gutierrez, Chiapas, 3300 ft, June 27–July 8, 1986 (E. Giesbert); 1 male, same locality, October 3, 1986 (R. Turnbow); 1 male, same locality, September 28–October 2, 1986 (J. E. Wappes); 1 male, Bosque el Imposible, Alhuachapan prov., 745 m, EL SALVADOR, June 20, 1979 (R. D. Cave).

This species is closely allied to *S. trispinosus*, but may be separated by the larger size, longer antennae, and relatively uniform elytral punctation.

Stenosphenus debilis Horn

Stenosphenus debilis Horn, 1885:179; Fisher, 1946:90; Linsley, 1963:18, fig. 5; Cope, 1984:34 (habits).

Stenosphenus comus Bates, 1892:169; Chemsak, 1967:80 (lectotype). NEW SYNONYMY.

Stenosphenus pruddeni Casey, 1912:346, Fisher, 1946:93; Linsley, 1963:22. NEW SYNONYMY.

Stenosphenus aridus Linsley, 1935:166; Fisher, 1946:88; Linsley, 1963:23. NEW SYNONYMY.

Stenosphenus nigricornis Fisher, 1946:90; Linsley, 1963:17. NEW SYNONYMY. *Stenosphenus debilis* Fall (not Horn), 1901:146.

Male.—Form moderately small, elongate; integument pale testaceous to medium brown, rarely piceous, pronotum and legs sometimes slightly paler, antennae, tibiae and tarsi sometimes darker. Head moderately short, moderately coarsely punctate; antennae about $1\frac{1}{3}$ times as long as body, with segments 3–7 spinose at apices. Pronotum quadrate or slightly longer than broad, widest near middle, sides moderately rounded; surface of disk with coarse, shallow punctures moderately dense except on base, apex, and smooth median area, punctures fine and dense laterally, base and sides clothed with fine, dense, recumbent silky hairs, and entire pronotum moderately sparsely clothed with long, pale, randomly directed, suberect hairs; prosternum with punctate patch subrectangular, divided medially by an indistinct carina. Elytra slightly less than 3 times as long as width across humeri, nearly parallel sided, rounded at apical $\frac{1}{5}$, apices slightly oblique, sinuate-truncate, with hind angles dentate; surface moderately coarsely, densely punctate, with moderately dense, long, subrecumbent, recurved, pale setose pubescence. Underside behind prosternum with lateral pubescence short, fine, pale, appressed, silky. Length, 7.5–12 mm.

Female.—Similar to male, antennae as long as body, segments 3–8 spinose at apices. Prosternum with punctate patch obsolete, not bearing coarse punctures. Length, 8.5–12 mm.

Type locality.—Of *debilis*: Utah; *comus*: Villa Lerdo, Durango, Mexico; *prudeni*: Canyon of the Colorado, Arizona; *aridus*: Zion National Park, Utah; *nigricornis*: “Yuma, California.”

Range.—Utah, Arizona, and southern California, to northwestern Mexico and northern Baja California.

Flight period.—June–August.

This species is recognizable by the usually light brown integument, coarse punctures of the pronotum, and long, moderately dense pubescence. Slight variations in color, pubescence, and pronotal ratios do not appear to be sufficiently significant or constant to indicate separation of species. Recorded host plants include *Salix*, *Populus*, and *Morus*.

Stenosphenus rubidus Linsley

Stenosphenus rubidus Linsley, 1935:94.

Male.—Form moderately large, slender, elongate; integument moderately shining, reddish-brown, with antennae (including scape), legs, and elytral apices usually piceous, abdomen slightly infuscated. Head moderately coarsely punctate; antennae nearly twice as long as body, with segments 3–7 spinose at apices, 4th segment about $1\frac{1}{2}$ times as long as scape, 11th segment about $1\frac{1}{2}$ times as long as 10th. Pronotum a little longer than broad, sides moderately rounded, somewhat narrowed anteriorly, slightly constricted at base; surface of disk finely, sparsely punctured, nearly glabrous, with a few scattered coarser punctures bearing suberect long hairs laterally near base, rarely feebly transversely rugose; prosternum with coarsely punctate area large, subtrapezoidal, not divided in middle; prothorax without accessory lateral punctate patches. Elytra about 3 times as long as width across humeri, tapering gradually, apices sinuate-truncate, slightly oblique, bi-

dentate, with tooth of outer angle stoutest; surface moderately coarsely, but not closely punctate, clothed with moderately short, suberect, pale hairs. Abdomen laterally clothed with fine, obscure, appressed, yellowish, silky pubescence. Length, 13–18 mm.

Female.—Similar to male, antennae surpassing elytral apices by about 2 segments, segments 3–8 or 9 spined at apices, 11th segment slightly longer than 10th. Prosternum with punctate patch obsolete, coarse punctures absent. Length, 13–17 mm.

Type locality.—Bejucos, Mexico, Mexico.

Range.—Pacific slope of west-central Mexico.

Flight period.—July–October.

Material examined.—From MEXICO: 4 males, 2 females, 3 mi E Villa Union, Sinaloa, July 24, 1972 (Chemsak & Michelbachers); 2 males, Villa Union, Sinaloa, July 20, 1953 (University of Kansas Expedition); 1 female, 5 mi N Mazatlan, Sinaloa, July 28, 1964 (Chemsak); 1 female, Chupaderos, Sinaloa, July 3, 1963 (Parker & Stange); 1 male, Concordia, Sinaloa, July 4, 1963 (Parker & Stange); 1 male, 3 km E Malpica, Sinaloa, July 30–31, 1980 (J. Cope); 1 male, 7 mi W Cihuatlan, Jalisco, July 18, 1963 (R. L. Westcott); 1 male, 1 female, 17.6 km N Chamela, Jalisco, July 18, 1987 (R. Turnbow); 1 male, 1 female, 41 km NE Ixtapa, Guerrero, July 17–20, 1985 (J. E. Wappes). Also taken at Chamela from August to October.

This distinctive species may be recognized by its large size, and red-brown integument. The feebly rugose pronotal disk described by Linsley appears in very few specimens from the type locality; the majority of examples from Sinaloa and Jalisco seen in this study have the pronotal surface smooth and nearly glabrous; however, no other differences are apparent. Adults have been taken on flowers of *Jatropha* and *Croton*.

***Stenosphenus maccartyi* Giesbert and Chemsak, NEW SPECIES**

(Fig. 6)

Male.—Form moderately large, elongate, tapering; integument reddish-brown, with head, pronotum, and femora somewhat more orange-brown, and antennae, except for scape, tibiae, and tarsi dark brown. Head moderately coarsely, closely punctate; antennae surpassing elytral apices by about 3 segments, with spines on segments 3–8, 4th segment subequal in length to scape, 11th segment at most slightly longer than 10th. Pronotum about as long as broad, widest at middle, with sides rounded, base slightly constricted; surface of disk finely, sparsely punctate, glabrous in middle; sides moderately coarsely punctate, moderately sparsely clothed with subrecumbent setose hairs intermixed with a few long erect hairs; prosternum with coarsely punctate area large, subtrapezoidal, not divided in middle; prothorax with large, oval, lateral accessory punctate patch on each side. Elytra about $2\frac{3}{4}$ times as long as width across humeri, tapering, apices sinuate-truncate, slightly oblique, bidentate, with tooth of outer angle stout; surface moderately coarsely, moderately closely punctate; clothed with subdepressed, golden, setose hairs. Abdomen laterally with fine, appressed, silky, golden pubescence. Length, 14–19 mm.

Female.—Similar to male, but slightly less tapering. Antennae surpassing elytral apices by about 2 segments, with spines at apices of segments 3–9. Prosternal

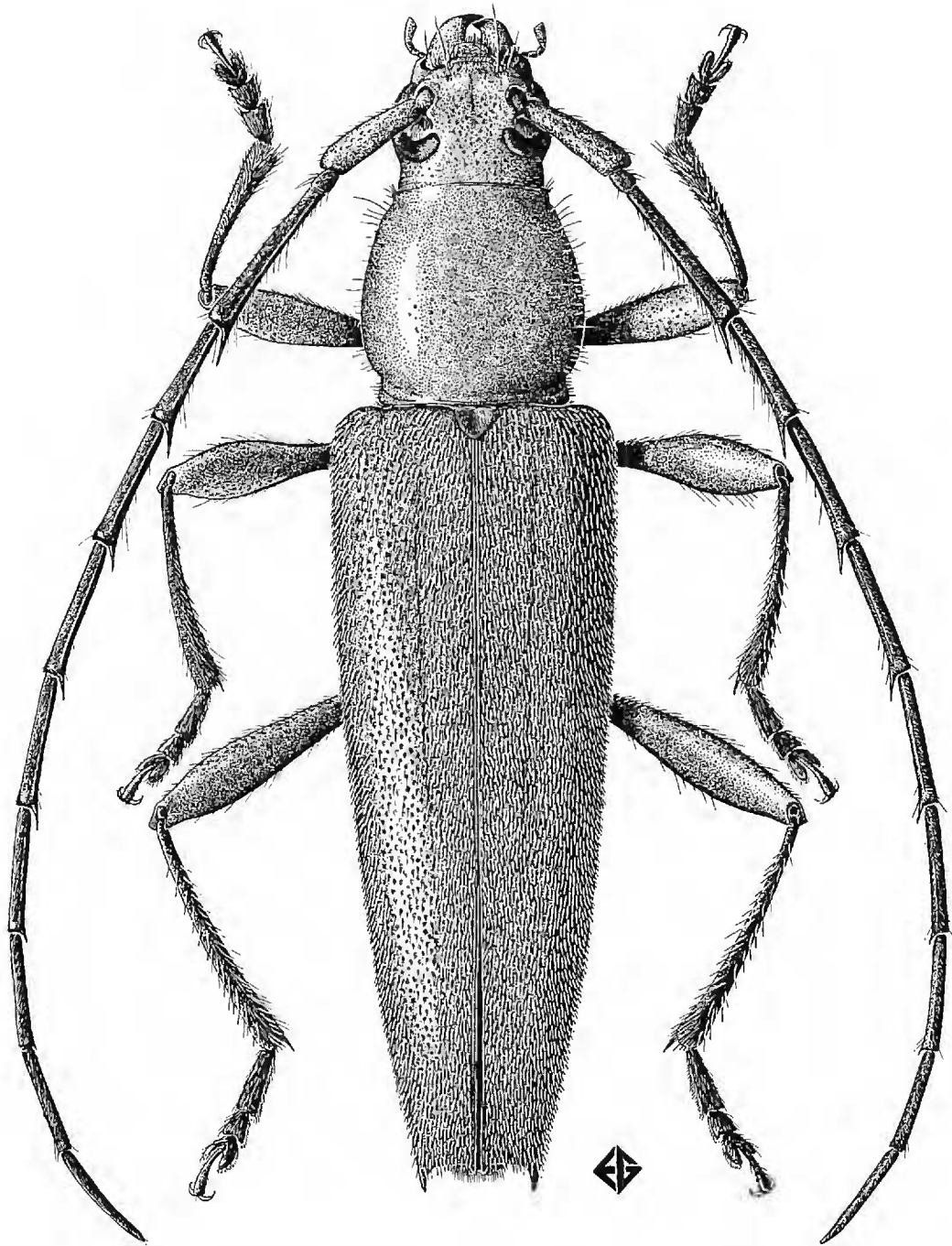


Figure 6. *Stenosphenus maccartyi*, new species, female.

punctate area obsolete, lacking coarse punctures. Prothorax punctate laterally, but lacking clearly defined, large, oval, punctate accessory patches. Length, 14–20 mm.

Types. — *Holotype* male, *allotype* (Instituto de Biología, UNAM), and 52 *paratypes* (16 males, 36 females), from MEXICO, Estacion de Biología Chamela, Jalisco, on blossoms of *Croton* sp., October 14–23, 1986 (J. A. Chemsak, J. D. McCarty). Additional *paratypes*, all from MEXICO, as follows: 4 males, 1 female, from type locality, at light, July 8–16, 1985 (J. Chemsak, H. Katsura, A. & M. Michelbacher); 2 males, 2 females, same locality, July 10–20, 1985 (E. Giesbert); 1 female, same locality, August 9, 1982 (C. W. & L. O'Brien, G. Wibmer); 1 female, same locality, July 19, 1987 (R. Turnbow); 1 male, same locality, at lights, July 7–15, 1987 (Chemsak, E. & J. Linsley); 8 males, 5 females, same locality, July 15–24, 1987 (F. Hovore); 14 males, 22 females, same locality, on blossoms of *Gouania rosei*, October 16–20, 1987 (Giesbert); 1 female, 17.6 km N Chamela, Jalisco, July 18, 1987 (Turnbow); 1 female, 9 km S Chamela, Jalisco, July 15–19, 1986 (J. Cope); 1 male, 1 female, 21 km N Melaque, Jalisco, at lights of Fiesta Americana sign, July 12, 1987 (Chemsak, E. & J. Linsley); 4 males, 2 females, same locality, July 17–22, 1987 (Hovore); 4 males, 1 female, 33–40 km S Chamela,

Jalisco, July 14–19, 1986 (Cope); 1 male, 43.7 km NW Ixtapa, Guerrero, July 17, 1985 (R. Turnbow); 1 male, 1 female, 7 mi W Tehuantepec, Oaxaca, July 1, 1972 (G. H. Nelson); 1 female, 30 mi NE Tehuantepec, Oaxaca, July 8, 1955 (D. Giuliani); 1 male, 23 mi S Matias Romero, Oaxaca, August 14, 1963 (F. D. Parker, L. A. Stange); 1 female, 5 mi E La Ventosa, June 28, 1965 (C. Hall); 1 female, Manzanillo, Colima, July 4, 1965 (Hall).

Individual specimens of this species are among the largest of any seen in this study. *S. maccartyi* closely resembles *S. rubidus*, but may be easily separated by the shorter antennae, with relatively shorter 4th and 11th segments, the lateral accessory punctate patch of the prothorax, the slightly more robust form, and the elytral pubescence, which is much more conspicuous than on *S. rubidus*, and, to the naked eye, imparts a yellowish sheen which contrasts somewhat with the orange-brown pronotum.

We take pleasure in naming this species for John D. McCarty, in recognition of his collecting efforts and cooperation.

Adults have been taken on flowers of *Allenanthus*, *Colubrina*, and *Sapium* from June to December.

Stenosphenus insulicola Fisher

Stenosphenus insulicola Fisher, 1942:24; de Zayas, 1975:159, pl. 21, fig. d.

Female(?).—Form small, convex, elongate, nearly parallel sided; integument shining, piceous, with head and prothorax yellowish testaceous, elytra with moderately strong bluish-violaceous metallic reflection. Head moderately wide, coarsely, closely punctate; antennae about as long as body, segments 3–7 with short apical spines. Pronotum slightly longer than broad, widest at middle, with sides feebly, uniformly rounded, base and apex of subequal width; surface finely, sparsely, indistinctly punctate, with a few scattered erect hairs. Elytra slightly more than 2½ times as long as width across humeri, sides subparallel, apices subtruncate; surface coarsely, densely, deeply, uniformly punctate, moderately sparsely, uniformly clothed with pale suberect hairs. Length, 6–7 mm.

Type locality.—Coast below Pico Turquino, Cuba.

Range.—Cuba.

Flight period.—July.

The single specimen examined, glued to a card, appears to be a female. The existing literature on this pretty little species does not deal with sexual characters, particularly of the prosternum, and it is difficult at this time to ascertain its true status. The distribution, metallic color, style of elytral punctation, and possible lack of prosternal punctate areas on the male, make the species somewhat anomalous in *Stenosphenus*, but for the present, it remains in the genus.

Stenosphenus rufipes Bates

(Fig. 4)

Stenosphenus rufipes Bates, 1872:191; Bates, 1880:66; Bates, 1885:312.

Stenosphenus sublaevicollis Bates, 1892:168; Chemsak, 1967:80 (lectotype). NEW SYNONYMY.

Male.—Form moderately small, moderately robust; integument feebly shining,

piceous, with legs brownish-orange, and antennae piceous to dark orange-brown. Head moderately elongate, narrow, nearly horizontal, moderately coarsely punctate; antennae about as long as body, moderately stout, with segments 3–7 stoutly spined at apices, 3rd segment feebly arcuate, 4th segment slightly shorter than scape. Pronotum slightly longer than broad, widest at base, sides feebly rounded, tapering to apex; surface glabrous, with scattered fine punctures; prosternum with a pair of small, oval, widely separated, coarsely punctate patches. Elytra moderately short, about $2\frac{1}{2}$ times as long as width across humeri, apices obliquely emarginate-truncate, bidentate; surface moderately densely and coarsely, uniformly punctate, uniformly clothed with suberect, pale yellowish hairs. Abdomen with terminal sternite armed in middle of apex with a stout spine. Legs with mesotibiae flattened and dilated at apices, with inner apical spur stout, incurved. Length, 9–12 mm.

Female.—Similar to male, but slightly more robust, with elytra a little less than $2\frac{1}{2}$ times as long as width across humeri. Antennae slightly shorter than body, with segments 3–8 spined at apices. Prosternum finely punctate, lacking oval punctate patches. Abdomen with apical sternite unarmed. Legs with mesotibiae not modified. Length, 10–14 mm.

Type locality.—Of *rufipes*: Tehuantepec, Pacific side, Mexico; *sublaevicollis*: Acapulco, Guerrero, Mexico.

Range.—Central and western Mexico (see Fig. 4).

Flight period.—July–October.

Males of this species are unique in the genus, with the peculiar sexual modifications of the abdomen and mesotibiae. Adults have been taken on flowers of *Buddleia*, *Jatropha*, *Croton*, *Allenanthus*, *Colubrina*, and *Heliocarpus* and reared from *Serjania*.

***Stenosphenus penicilliventris* Giesbert and Chemsak,
NEW SPECIES**

Male.—Form moderately small, elongate, slender, parallel sided; integument shining, black, elytra with a feeble violaceous-blue, metallic reflection, pronotum often red. Head coarsely, irregularly, subrugosely punctate; antennae about as long as body, segments 3–7 with small apical spines. Pronotum slightly longer than broad, nearly cylindrical, widest at middle, sides feebly rounded, base and apex shallowly impressed; surface of disk sparsely, indistinctly punctate, nearly glabrous except for a thin, indistinct line of fine hairs in basal impression, sides somewhat more densely punctate, with a few long erect hairs; prosternum with punctate area wide, undivided, not very clearly defined. Elytra convex, about 3 times as long as width across humeri, sides nearly parallel, apices shallowly emarginate-truncate, bidentate; surface moderately coarsely, densely, deeply punctate, moderately sparsely, uniformly clothed with suberect pale hairs. Metasternum with a long, brushlike tuft of erect, coarse, pale orange hairs anterior to each metacoxa. Abdomen laterally clothed with short, silky, appressed, pale pubescence. Length, 7.5–10 mm.

Female.—Similar to male in form, antennal length, and spines, but with the prosternal punctate patch obsolete, lacking coarse punctures. Metasternum with tufts reduced to a few fine, pale, erect hairs, leaving small underlying spot of fine punctures visible. Length, 9–12.5 mm.

Types.—*Holotype* male, *allotype* (California Academy of Sciences), and 11 *para-*

types (6 males, 5 females), from MEXICO, Sumidero Canyon 4000', Chiapas, July 7–8, 1986 (E. Giesbert, J. Wappes). 17 additional *paratypes*, 7 males, 10 females, same locality, June 14–26, 1987 (E. Giesbert, J. Wappes).

Males of this species, like those of *S. rufipes*, exhibit unusual sexual modification, although of a different type: the tufts of long hairs on the male metasternum bear a remarkable resemblance to the tip of an artist's fine sable-hair brush in miniature. The black pronotal color in the type series at hand occurs in only 4 females. No all-black males were seen.

***Stenosphenus cordovanus* Giesbert and Chemsak,**
NEW SPECIES
(Fig. 7)

Male.—Form moderately small, elongate, moderately tapering; integument shining, dark, rich cordovan brown, with femora sometimes dark orange-brown. Head moderately narrow, moderately coarsely, subrugosely punctate; antennae surpassing elytral apices by about 3 segments, with spines at apices of segments 3–7 or 8. Pronotum about as long as, or slightly longer than broad, widest behind middle, sides moderately rounded, tapering to apex; surface finely, moderately sparsely punctate and glabrous in central portion of disk, with extreme base moderately coarsely punctate, and lateral portions moderately finely, densely, uniformly punctate, and moderately clothed with recumbent whitish setose hairs; prosternum with coarsely punctate area large, subrectangular, indistinctly divided in middle. Elytra more than 2½ times as long as width across humeri, sides feebly rounded, tapering, apices slightly oblique, emarginate, bidentate apices; surface moderately finely, uniformly punctate, uniformly clothed with moderately dense, suberect, yellowish-white setose hairs. Abdomen with lateral pubescence moderately sparse, subrecumbent, setose, middle glabrous. Length, 10–12 mm.

Female.—Similar to male, antennae surpassing elytral apices by about one segment. Prosternum with punctate patch obsolete, finely, obscurely punctate. Length, 10–12 mm.

Types.—*Holotype* male, *allotype* (California Academy of Sciences), and 6 *paratypes* (3 males, 3 females) from MEXICO, Chamela, Jalisco, July 10–15, 1985 (E. Giesbert). Additional *paratypes*, all from MEXICO, as follows: 1 female, Apatzingan, Michoacan, August 5, 1940 (H. Hoogstraal); 1 male, 1 female, Apatzingan, Michoacan 1200', "semi-desert scrub," August 21, 1941 (Hoogstraal); 4 males, 6 females, 30 mi NE Tehuantepec, Oaxaca, July 8, 1955 (D. Giuliani); 1 female, 7 mi W Tehuantepec, July 2, 1972 (G. H. Nelson); 1 male, near El Marmol, Sinaloa, August 4, 1983 (F. Hovore); 3 males, 3 females, Hwy. 200, 43.7–51 km NE Ixtapa, July 17–20, 1985 (J. Wappes, R. Turnbow); 1 female, Estacion de Biologia Chamela, Jalisco, October 14–23, 1986 (J. A. Chemsak); 1 male, 2 females, same locality, July 15–24, 1987 (Hovore); 1 female, 9 km S Chamela, Jalisco, July 15–19, 1986 (J. Cope); 3 males, 2 females, 17.6 km N Chamela, Jalisco, July 18, 1987 (Turnbow); 1 male, 40 km S Chamela, Jalisco, July 14–17, 1986 (Cope).

This species may be distinguished by the dark brown integument, and the shining glabrous central disk of the pronotum, distinctly bordered by recumbent whitish setose hairs.

Adults have been collected on flowers of *Sapium*.

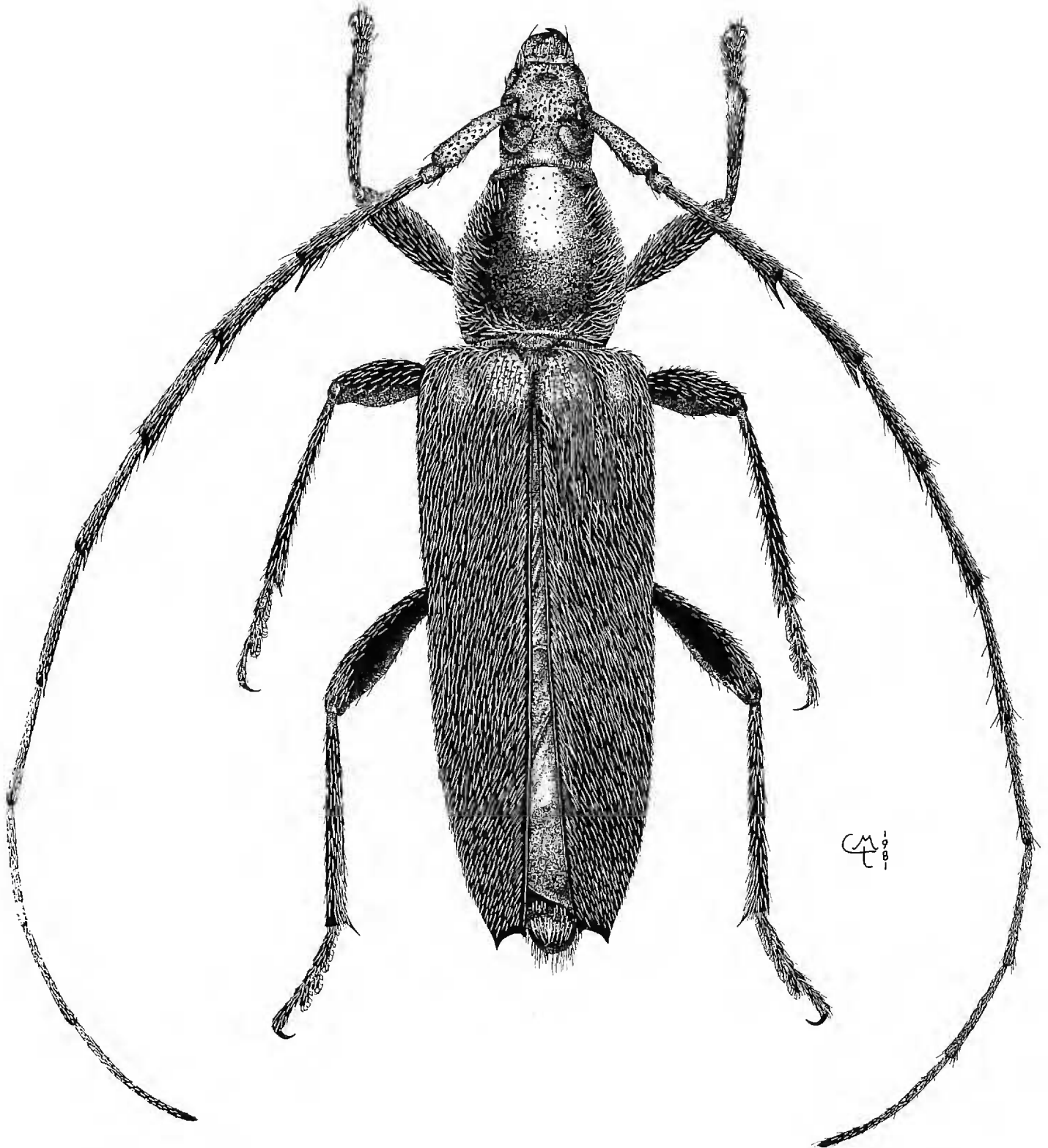


Figure 7. *Stenosphenus cordovanus*, new species, male.

***Stenosphenus cribripennis cribripennis* Thomson**
(Fig. 8)

Stenosphenus cribripennis Thomson, 1860:372; Bates, 1880:66; Bates, 1885:312; Duffy, 1960:133, figs. 75, 76 (larva); Chemsak, Linsley, and Mankins, 1980:30.

Male. — Form moderate sized, elongate; integument shining, piceous black, with femora orange-red, antennae, tibiae, and tarsi dark brown. Head moderately narrow, somewhat coarsely, densely punctate; antennae surpassing elytral apices by about 3 segments, with segments 3–7 spined at apices. Pronotum broad, very slightly wider than long, sides moderately rounded, feebly narrowed at base, widest near middle, narrowing somewhat to apex; surface of disk distinctly, moderately finely, sparsely, irregularly punctate, with punctures becoming more dense and regular laterally, disk glabrous dorsally, with lateral surface moderately clothed

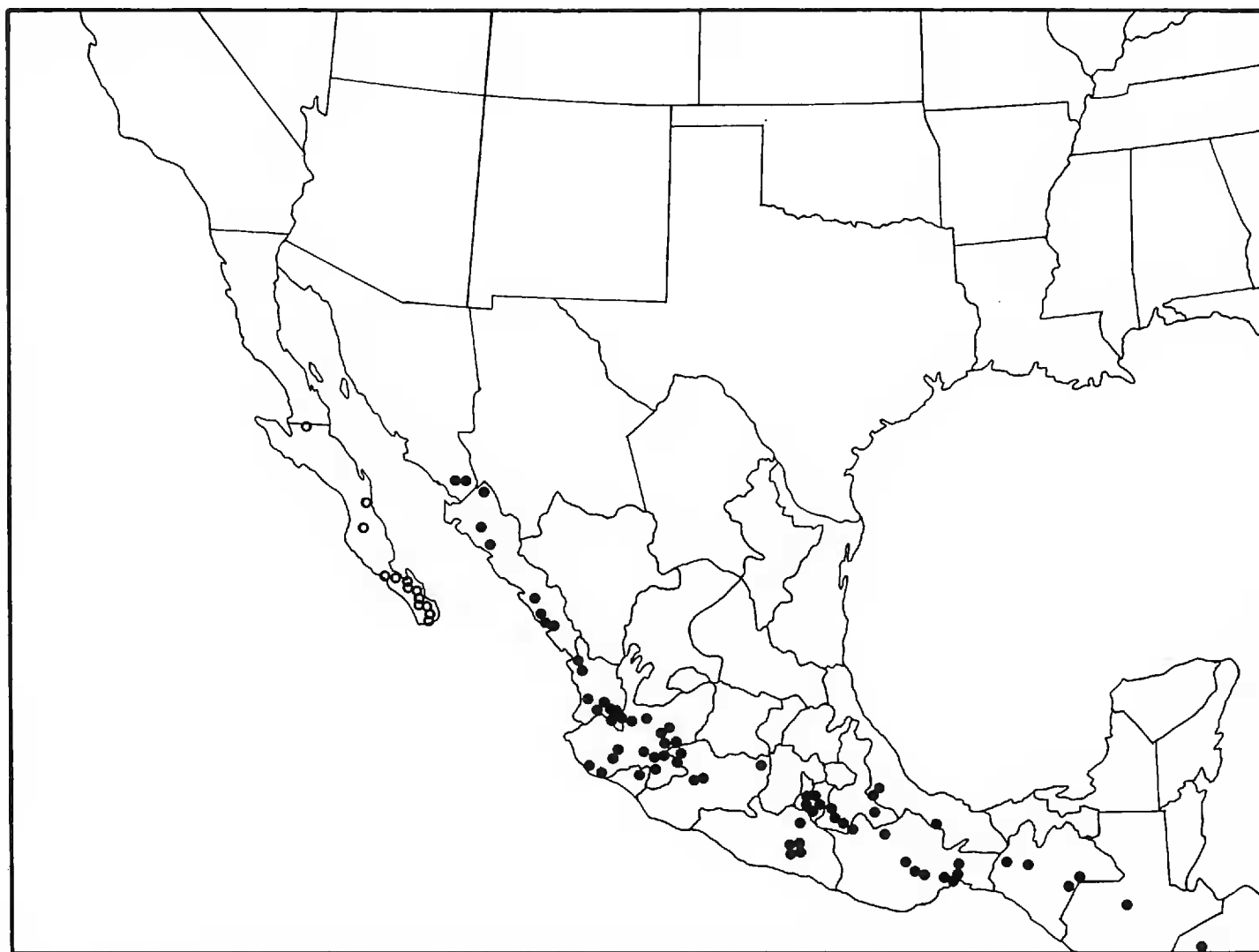


Figure 8. Known distribution of *Stenosphenus cribripennis cribripennis* Thomson (solid circles), and *Stenosphenus cribripennis novatus* Horn (open circles).

with pale, suberect hairs; prosternum with a pair of well-separated, oval, coarsely punctate impressions anterior to procoxae. Elytra about $2\frac{3}{4}$ times as long as width across humeri, sides feebly rounded, tapering, apices oblique, emarginate-truncate, stoutly bispinose, and with a broad, indistinct carina on each side of suture; surface moderately coarsely, moderately densely punctate, moderately sparsely clothed with short, suberect, pale, setose hairs. Underside with episternal pieces clothed with fine, silky appressed pubescence; abdomen regularly, moderately coarsely punctate, less so in middle, sparsely clothed with suberect hairs. Length, 9–14.5 mm.

Female.—Similar to male, antennae about as long as body, with segments 3–8 spined at apices. Prosternum moderately finely punctate, but lacking coarsely punctate, oval impressions. Length, 9–14 mm.

Type locality.—Mexico.

Range.—Western Mexico to Honduras (see Fig. 8).

Flight period.—June–December.

This species is sometimes encountered in great numbers on blossoms of trees and shrubs, and is therefore quite common in collections. Although the larva was described by Duffy (1960), no larval host was given. *S. cribripennis* may be distinguished by the broad pronotum, which is nearly as broad as the elytral humeri, feebly narrowed at the base, and distinctly punctate, by the separated, oval punctate patches on the male prosternum, and by the stoutly bispinose elytral apices.

***Stenosphenus cribripennis novatus* Horn, NEW STATUS**

(Fig. 8)

Stenosphenus novatus Horn, 1885:178; Leng, 1887:193; Horn, 1894:338 (record); Schaeffer, 1911:125; Grossbeck, 1912:326 (record); Linsley, 1934:60 (record); Linsley, 1942:44.

Stenosphenus lucanus Casey, 1912:346.

Similar to *S. c. cribripennis*, but with pronotum red, with apex usually narrowly infuscated. Pronotum slightly more constricted at base; elytra slightly more robust, a little less than $2\frac{1}{2}$ times as long as width across humeri. Length, 9–11 mm.

Type locality. —Of *novatus*: Cape San Lucas; *lucanus*: Lower California.

Range. —Southern Baja California, Mexico (see Fig. 8).

Flight period. —September, October.

This population of *S. cribripennis* is restricted to southern Baja California and is remarkably consistent in form and coloration.

***Stenosphenus beyeri* Schaeffer**

Stenosphenus beyeri Schaeffer, 1905:163; Schaeffer, 1911:125; Fisher, 1946:91; Linsley, Knoll, and Statham, 1961:11 (record); Linsley, 1963:19.

Male. —Form moderately small, elongate, nearly parallel sided; integument blackish, rarely dark brown, with pronotum often red, or partially red with base and apex infuscated. Head moderately short, not narrowed, coarsely, moderately densely punctate; antennae surpassing elytral apices by about 2 segments, with segments 3–6 or 7 spined at apices. Pronotum slightly wider than long, with sides moderately rounded, widest in middle, width of base and apex subequal; surface irregularly, moderately densely, coarsely, shallowly punctate, with disk feebly impressed on each side of an indistinct, flat, median glabrous callus, sparsely clothed with suberect, pale, randomly directed hairs; prosternum with coarsely punctate patch wide, subtrapezoidal, indistinctly divided in middle. Elytra slightly more than $2\frac{1}{2}$ times as long as width across humeri, sides subparallel, apices truncate, unarmed, or at most with inner angles slightly dentate; surface densely, moderately coarsely, uniformly punctate, clothed with moderately short, suberect, pale hairs. Length, 8–12.5 mm.

Female. —Similar to male, antennae not attaining elytral apices, with segments 3–8 spined at apices. Prosternum with punctate patch moderately finely, rugosely punctate, but lacking coarse, deep punctures. Length, 9–13.5 mm.

Type locality. —Palmerlee, Cochise Co., Arizona.

Range. —Mountains of southern Arizona and New Mexico.

Flight period. —June–August.

S. beyeri bears a close relationship to the Texas populations of *S. sobrius*, but differs by the coarser, denser punctation of both the pronotum and elytra, as well as by the truncate, usually unarmed elytral apices. *S. beyeri* is apparently sympatric with *S. sobrius* populations in southern Arizona, from which it differs even more widely. In Arizona *S. sobrius*, the pronotal disk is sparsely punctate. In addition, *S. beyeri* is recorded as breeding in locust and walnut, and apparently, *S. sobrius* is associated with mesquite, hackberry and oak in the northern part of its range.

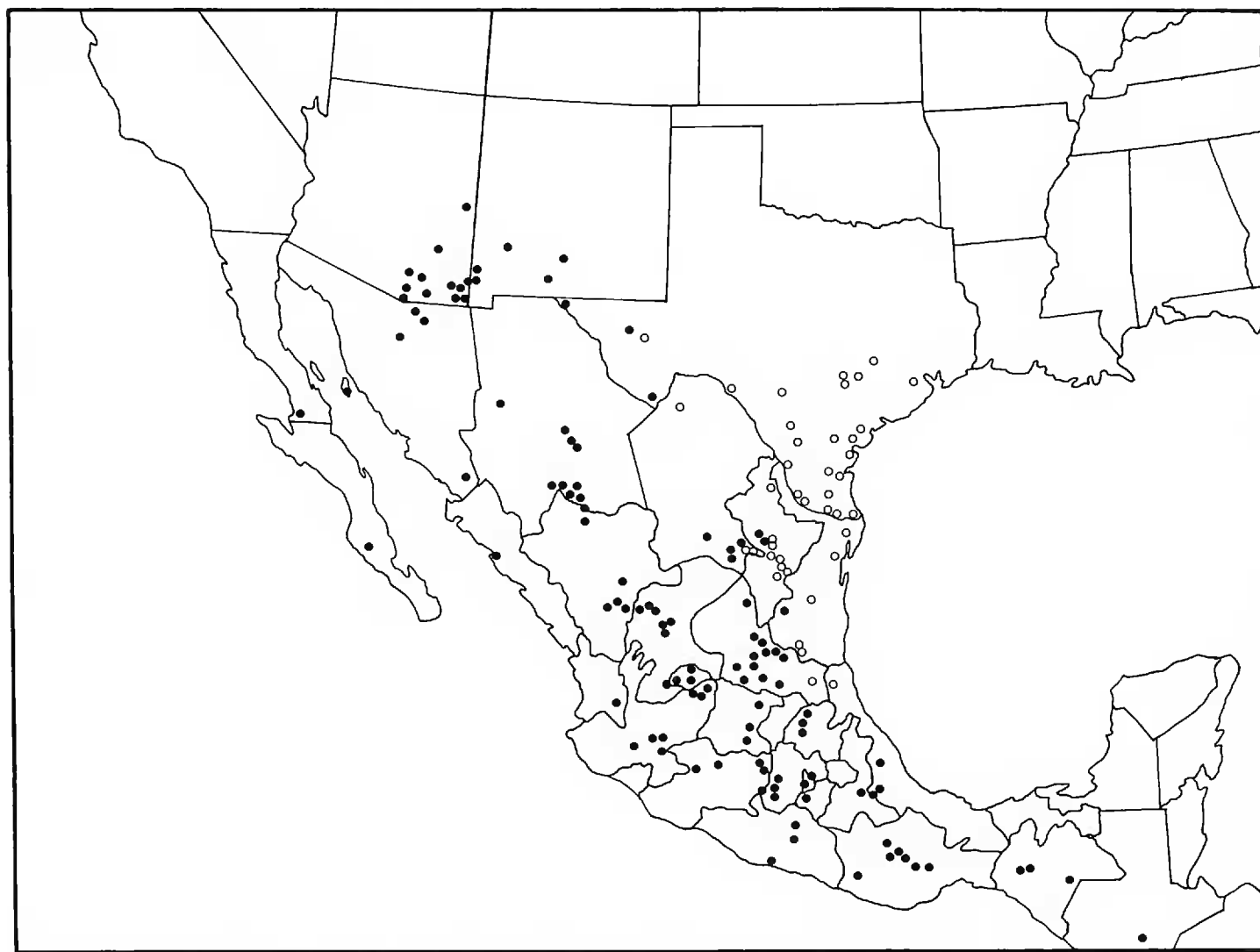


Figure 9. Known distribution of *Stenosphenus sobrius* (Newman) (solid circles), and *Stenosphenus dolosus* Horn (open circles).

Stenosphenus dolosus Horn

(Fig. 9)

Stenosphenus dolosus Horn, 1885:179; Leng, 1887:194; Schaeffer, 1911:125; Fisher, 1946:91; Linsley, 1963:19; Hovore and Penrose, 1982:24 (habits); Hovore, Penrose, and Neck, 1987:301 (habits).

Stenosphenus longicollis Casey, 1891:34; Casey, 1912:347; Fisher, 1946:93; Linsley, 1963:21. NEW SYNONYMY.

Stenosphenus castaneus Casey, 1924:269; Fisher, 1946:89; Linsley, 1963:15. NEW SYNONYMY.

Male.—Form moderately small and elongate; integument shining, castaneous to dark yellow-brown, with femora piceous, prothorax, and often head, reddish-orange. Head moderately short, irregularly, coarsely punctate; antennae surpassing elytral apices by about 1 segment, with segments 3–7 spined at apices. Pronotum slightly wider than long, sides broadly rounded, widest in middle, base and apex subequal in width; surface of disk smooth, shining, nearly impunctate and glabrous, except for a few long, erect, pale hairs, mostly at sides and base; prosternum with a pair of large, subrectangular, coarsely punctate patches separated in middle by a narrow longitudinal elevation. Elytra about $2\frac{3}{4}$ times as long as width across humeri, nearly parallel sides, apices obliquely truncate, inner angle dentate, outer

angle with a short, stout spine; surface moderately finely, uniformly punctate, clothed with pale, suberect, setose hairs. Length, 7–14 mm.

Female.—Similar to male, antennae slightly shorter than body, segments 3–8 spined at apices. Prosternum with punctate patches obsolete, surface feebly, transversely rugose, and indistinctly punctate. Length, 7–13 mm.

Type locality.—Of *dolosus*: Southwestern Texas; *longicollis*: Texas; *castaneus*: Texas.

Range.—Southern Texas and northeastern Mexico (see Fig. 9).

Flight period.—May–December.

This species is closely allied to *S. sobrius*, but differs consistently by the entirely dark legs, the castaneous to brown integument, with a shining, reddish-orange pronotum, and by the usually oblique truncation of the elytral apices. Several species of leguminous hardwoods (*Prosopis*, *Acacia*) are recorded as larval hosts.

Stenosphenus sobrius (Newman)

(Fig. 9)

Elaphidion sobrium Newman, 1840:30; LeConte, 1850:15.

Stenosphenus sobrius; White, 1853:105; Bates, 1880:66; Bates, 1885:312; Horn, 1885:180; Leng, 1887:194.

Stenosphenus sobrinus; Fisher, 1946:94 (error).

Elaphidion amabile Newman, 1841:112. NEW SYNONYMY.

Stenosphenus amabilis; White, 1853:104; Bates, 1880:65; Bates, 1885:312.

Stenosphenus subtilis Bates, 1880:66; Bates, 1885:312; Chemsak, 1967:80 (lectotype). NEW SYNONYMY.

Stenosphenus lepidus Horn, 1885:179; Leng, 1887:194; Casey, 1891:34; Schaeffer, 1911:124; Fisher, 1946:92; Linsley, Knull, and Statham, 1961:11 (record); Linsley, 1963:21; Hovore and Giesbert, 1976:355 (habits). NEW SYNONYMY.

Stenosphenus basicornis Linsley, 1934:60; Linsley, 1942:45. NEW SYNONYMY.

Stenosphenus arizonicus Linsley, 1935:165; Fisher, 1946:93; Linsley, 1963:22. NEW SYNONYMY.

Stenosphenus blairi Linsley, 1935:94. NEW SYNONYMY.

Stenosphenus rossi Linsley, 1942:45, pl. 4, fig. 8; Fisher, 1946:91. NEW SYNONYMY.

Stenosphenus piceus Knull, 1946:253; Linsley, 1963:21. NEW SYNONYMY.

Stenosphenus texanus Knull, 1946:254; Linsley, 1963:22; Hovore and Giesbert, 1976:355 (habits); MacKay, Zak, and Hovore, 1987:363 (habits). NEW SYNONYMY.

Male.—Form moderate sized, elongate; integument moderately shining, black, with femora at least partially red, head, pronotum, and underside black or red. Head moderately short, moderately coarsely, irregularly punctate; antennae surpassing elytral apices by 2 or 3 segments in large specimens, somewhat less in smaller specimens, segments 3–7 or 8 spined at apices. Pronotum about as long as broad, sides moderately rounded, widest at or behind middle; surface of disk sparsely, irregularly, moderately coarsely, shallowly punctured, nearly glabrous, with a few long erect pale hairs at sides; prosternum with punctate patches wide, subrectangular, separated in middle by a sometimes obscure impunctate, rugose ridge; prothorax often more densely punctate laterally. Elytra about $2\frac{3}{4}$ times as

long as width across humeri, sides feebly tapering, apices sinuately emarginate-truncate, angles strongly dentate. Abdomen with lateral pubescence fine, pale, silky, recumbent. Length, 7–13 mm.

Female.—Similar to male, antennae slightly shorter than body, with segments 3–8 or 9 spined at apices. Prosternum with punctate patches obsolete, feebly rugose and obscurely punctate. Length, 7–15 mm.

Type locality.—Of *sobrius*: North America; *amabilis*: Mexico; *subtilis*: San Gerónimo, Guatemala; *lepidus*: Arizona; *basicornis*: Tiburon I., Gulf of California; *arizonicus*: Globe, Arizona; *blairi*: Tejupilco, Mexico; *rossi*: San Domingo, Lower California; *piceus*: Davis Mts., Texas; *texanus*: Davis Mts., Texas.

Range.—Southwestern U.S., to Baja California, throughout Mexico to Guatemala (Fig. 6).

This complex and variable species consists of many populations that have been given names in the past and a large number of specimens of these various phenotypes have been examined in this study. *S. blairi*, *S. basicornis*, and *S. rossi* are populations of smaller average size, but do not seem to be otherwise distinct from small specimens of other populations. Other characters used to separate some of these species, such as antennal length, appear to be allometric. Although all of the specimens examined have at least a portion of the femora reddish, integumental color of the body ranges from all black to reddish with black elytra, with the degree of melanism apparently random in many populations. In the southwestern United States and northern Mexico more than half of specimens have red pronota; but toward the southern part of the range, melanism appears to increase, with about 80% of specimens from southern Mexico black with only the femora red. The shape of the male prosternal punctate impressions appears to vary from oval, as in some of the smaller specimens from Arizona and northern Mexico (and one of the *paratypes* of *S. basicornis*), to large and quadrate, with southern Mexican and Guatemalan populations tending to have the dividing ridge less distinct. An area of very fine, dense punctures and pubescence on the lateral surface of the prothorax also occurs commonly in the more southern populations. The above synonymies are based on the observation of clinal, allometric, and random melanic differences between populations and individuals in what appears to be a single, widespread, and variable species. In Texas and New Mexico this species has been reared from *Prosopis*, and from *Celtis* and *Cercocarpus* in Arizona.

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Carolyn Tibbetts prepared one of the illustrations.

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